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THE WORK OF WALL STREET

AN ACCOUNT OF THE FUNCTIONS, METHODS
AND HISTORY OF THE NEW YORK
MONEY AND STOCK MARKETS

BY
SERENO S. PRATT



REVISED, REWRITTEN AND ENLARGED

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PREFACE

So vast are the transactions of Wall Street, so tremendous are the interests which it serves, so fundamental to the well being and prosperity of the whole world are the operations of its systems of credit and securities, and so varied and intricate are the problems involved in the activities of a great international money market, that to attempt to put within a volume of moderate size an adequate account of its work, and of the principles which underlie, and the spirit which inspires, that work, is an undertaking of large proportions. The author hopes, however, that he has, in good measure, achieved success.

The writing of "The Work of Wall Street" means something more than a description of the speculative market. The Stock Exchange is, indeed, an important part of Wall Street, but it is not Wall Street. The financial district includes, but is not embraced by, the stock-market. The Clearing-house, far more the Stock Exchange, is the heart of Wall Street. A description of the work of Wall Street is really an account of the mighty economic forces by which the commerce and industry of the richest and most powerful nation of the globe are carried on. A commercial country without a central money market would be like a government without a capital. The greatness of Wall Street is a visible proof of the greatness of the United States. The work of Wall Street is the work of facilitating, energizing, moving, expanding and safeguarding the work of the country.

Since "The Work of Wall Street" was first published in January, 1903, many changes have taken place in the structure of the financial center—changes so important that a thorough revision has required the making of what

is practically a new book, in matter and form, although as much of the old is retained as has been unaffected by the passage of time.

The three most notable changes in the machinery by which Wall Street performs its work have been:

1. The strengthening of the Bank Clearing House by the admission of the principal trust companies as members; by the establishment of a system of examinations by which the Clearing-house is enabled to maintain the banking position more securely; and by the widening of the scope of the bank statement and the improvement in its form.

2. The amendment of the rules of the New York Stock Exchange, by which improvements have been instituted in the organization of the stock-market without destroying its facilities for effective distribution of the securities of the country and the better mobilization of capital; one of the most noteworthy of these improvements being the abolition of the Unlisted Department; and

3. An expansion, through both governmental action and individual initiative, of that publicity which is the surest safeguard of investor and speculator, and the strongest preventive of the evils of deceitful manipulation and dishonest promotion.

Moreover much financial history has been made in the past ten years; and what amounts almost to a revolution in business so far as its relations to government is concerned, is in progress. The question is being fought out with Wall Street as a battlefield, whether the business of the country shall be conducted on a competitive basis, or whether modern coöperation on a big scale shall be permitted, or whether it is possible so to combine competition and coöperation as to obtain their largest efficiency, without the peril of economic anarchy on the one hand or financial tyranny on the other.

By the decisions of the courts, by the investigations of expert commissions, and by the studies of publicists and economists, new light has been thrown upon the

theory and practice of money and banking, and of promotion and business organization.

The Monetary Commission, of which ex-Senator Aldrich is Chairman, has drafted a plan of monetary reform which, if adopted, will take rank with the most notable constructive financial achievements in the history of this country since the genius of Alexander Hamilton organized the Treasury and established the first United States Bank. The publications of the Commission alone constitute a most important contribution to the literature of money, banking and investment, and are of enormous value in educating public opinion as to the inestimable benefits of modern credit, properly organized and safeguarded.

Scarcely less valuable than the work of the Monetary Commission is the report of the Railroad Securities Commission, appointed by President Taft, of which Dr. Hadley, President of Yale University, was Chairman, and which presents, with clearness and scientific precision the principles that should govern the issuance of railroad securities.

The investigation in 1909 of speculation in securities and commodities by a commission appointed by Governor (now Justice) Hughes, and headed by Horace White, has served at once to demonstrate the economic value of speculation and to correct many defects in the machinery of the speculative markets.

A number of decisions, notably those by the United States Supreme Court in the interpretation of the Sherman Anti-Trust Law, have profoundly affected the organization and conduct of big business.

In addition to these great changes, the past ten years have witnessed in this country a notable development of the investment market and a corresponding development of facilities for supplying the needs of investors. The science of investment is better understood, and the art of investing as practiced by capitalists, both large and small, is much more intelligent and discriminating; while the high class bond houses by their methods of publicity

and distribution are making more distinct the line marking the separation between the true and the false, the sound and the bogus.

In the meantime the volume of speculation since the panic of 1907, has materially declined, which is attributed by some to the State tax on stock transfers, amounting to two dollars per 100 shares. This tax imposed, during the administration of Governor Higgins—because “the State needed the money,”—is uneconomic because it is a tax on sales, but it has proved a heavy revenue producer, though hurtful to the commission houses. The reduction in the volume of sales may be more properly attributable to the decline in gambling and manipulative transactions. Wall Street, however, has passed through other periods of speculative depression and then experienced a rapid revival, as for instance, after the panic of 1893.

In this connection attention should be called to the wonderful expansion in advertising in the past decade, and especially to what has been achieved in widening the scope, improving the quality, and strengthening the power of financial advertising. Some progress at least has been made in preventing this stupendous agency for the wise and wide distribution of investments from being seized by the hands of the sharks who are ever using the advertising columns for the purpose of swindling the innocents and the fools out of their savings.

In spite of the tremendous strain put upon capital and enterprise during the last ten years, we have as a nation made progress in material prosperity, for such are the vast resources of our country, that political and economic changes may retard growth, but cannot entirely stop growth.

In ten years the estimated wealth of the country has increased fully \$20,000,000,000. Our money in circulation has increased a billion dollars. Our bank clearings and bank deposits have doubled.

When “The Work of Wall Street” was first published

in January, 1903, it was practically a pioneer in its field. It was the first attempt to describe comprehensively the machinery with which Wall Street promotes the enterprise and facilitates the exchanges of the country and provides a regulated market for securities. In the preface of the first edition it was said that, while Wall Street filled a large space in the daily papers, this was chiefly in a sensational way; and there existed a remarkable degree of ignorance regarding the actual work of the financial district, while the history of speculation, and of its effects on the development of civilization had not been deeply studied. Ten years, however, have wrought a change.

Since the issue in 1903, there have been a number of publications, books, pamphlets and articles covering in part the same field as "The Work of Wall Street." The past ten years have been a time of popular education in the theories and practices of business, and there has been a notable output of books bearing upon various branches of the subject. Of the publications—books and magazine articles—relating directly to securities and Stock Exchanges, Professor S. S. Huebner of the University of Pennsylvania gave in the *Annals of the American Academy* (May, 1910) a list of 198; and a majority of these have been published since "The Work of Wall Street" was issued in 1903. Moreover since Professor Huebner made his bibliography other publications have appeared which should be added to the list. In "The Work of Wall Street" the author makes reference to over one hundred books, reports and pamphlets on money, banking and speculation.

Instead, therefore, of there being a lack of information regarding the work of Wall Street, as was the case when the first edition was issued, there is now what might almost be described as a literature on the subject. This fact might be regarded as rendering unnecessary a revision of "The Work of Wall Street" were it not for two things. There are now so many publications, relating to various branches and aspects of the Wall Street system,

that there is still a place left for a book, like this, which aims at giving a comprehensive but concise account of the whole mechanism in the light of the development of the past ten years, in order that the investigator may find, in one place, the essentials of a subject, which in some of its different parts may, perhaps, be found in larger detail in other publications. Moreover, "The Work of Wall Street," in spite of the fact that it was written ten years ago, still remained, according to Mr. F. W. Hirst of the London Economist, "the best description of the Wall Street system." Under such conditions it has seemed proper to continue its publication and to bring it up to date by discriminating revision.

In making this revision the author has believed that it was better to leave untouched that which has stood the test of ten years, and make only such alterations and additions as were rendered necessary by the actual changes in the system itself and by a larger view of the subject. This has required, however, the omission of much old matter, and much new writing, with the net result of materially increasing the size of the volume and making it virtually a new book. The author has deemed it to be in the interest of the student to include, in its entirety, in this edition, the report of the Hughes Commission on speculation, to which he has added a number of notes of his own for the further enlightenment of the reader. The chapter on the Stock Exchange Clearing House, having received the approval of the Chairman of the Clearing House Committee when first published, is continued, unchanged except for a slight explanatory note.

New chapters on the function and the scope of Wall Street, on investment, speculation and gambling, and on reading the market, have also been introduced, and much new matter has been added in the chapters on "The Stock Company," "Listing of Securities," "The Stock Exchange," "The Credit Institutions and the Clearing House," "The Bank Statement and the Movement of Money," "The Investment Market," "The Curb

Market," "Foreign Exchange and the Balance of Trade," and "Panics." In fact most of the book has been rewritten. Numerous citations from economic and financial authorities have been added, and most of the chapters conclude with a bibliography.

To Mr. James G. Cannon, President of The Fourth National Bank, a leading authority on commercial credits and Clearing Houses, the author owes the original inspiration for this book, as well as valuable assistance in the gathering of material. The author is also indebted to Mr. Maurice L. Muhleman, Secretary of the Hughes Commission, and formerly Deputy Assistant United States Treasurer, for important new matter in the chapter on "The Subtreasury" and also for further assistance. He desires likewise to make large acknowledgment of help to his friend and former colleague, Mr. Thomas F. Woodlock, once editor of the "The Wall Street Journal," but now member of the New York Stock Exchange.

In the revision moreover he has had the active assistance of his son, Mr. Thomas B. Pratt, of "The Wall Street Journal."

The author himself has had for several years no connection whatever with the securities market, and in view of his other interests, he would not have undertaken a further description or analysis of its mechanism, if it had not been for the fact that he felt the responsibility resulting from his authorship of "The Work of Wall Street"; and as it had to be revised, he believed that it was his special duty to perform the labor.

Returning to his study of the Wall Street system, after several years of absence, he finds that his outlook upon it as a friendly but discriminating critic is unchanged, and he repeats what he said in the preface to the first edition:

"The author has conceived his duty to be that of a reporter rather than of an editor. He has sought to present the facts as they are, leaving to others to inquire why they are not something very different. He has endeav-

ored to maintain an impartial attitude toward Wall Street, neither seeking to defend it against just criticism nor joining in the too common assault upon it as a blot upon civilization. No one can study this theme with unbiased mind without being impressed with the indispensable place the stock-market fills in modern business, of the great value of its manifold services to the world, and of the extraordinary efficiency of its mechanism; and without, at the same time, realizing how vast are the evils to which it gives rise, how short and easy is the step from beneficent investment to reckless and unprincipled gambling, and how great is the peril of overspeculation."

Wall Street depends upon the country for its sustenance, but Wall Street is essential to national progress. Any attempt on the part of Wall Street to abridge the liberty or throttle the natural growth of the country, or any attempt on the part of the country in anger, revenge, or ignorant passion to destroy Wall Street would be equally ruinous, for a house divided against itself cannot stand.

The first edition was dedicated to J. Edward Simmons as a type of all that is best in the work of Wall Street. Mr. Simmons has since died after a business career crowned with honorable achievement.

S. S. P.

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CHAPTER I

EVOLUTION OF WALL STREET

Long indeed has been the evolution producing the sensitive and powerful mechanism of Wall Street, which has developed, naturally and inevitably, in response to human needs. The principal processes of the money market may be traced in their origin to the earliest times of which history makes record, and checks and bills of exchange had their beginning in ancient Rome, although banking in its modern sense may be said to date from the establishment of the Bank of England in 1649. "The deposit currency" by which business transactions are mostly carried on to-day is a still more modern development. Corporations also existed in Rome; but the limited liability stock company is a modern discovery, and, in connection with steam and electricity, it has constituted one of a trinity of inventions that has revolutionized the world's business. By its means the unit of commercial enterprise has expanded from the neighborhood, and even the State, to the dimensions of the continent; the number of individuals, who may unite in the conduct of an industry, from three or four partners to 60,000 to 70,000 stockholders; and the size of a market from the limits of a single city to the scope of the world. The stock company has enormously increased the opportunity and the power of co-operation in business. The inestimable benefits of this co-operation are eagerly desired, while its power is feared; and thus the problem of how best to subject this power to adequate control without entirely destroying its opportunities for good.

Origin of Stock Market.—Stock-certificates were a product of the seventeenth century. The first great modern company was the East India Company, which was incorporated in 1600. Soon after that the Hudson Bay Company sprang into existence. But it was not until the latter part of that century that the shares in these companies began to be actively traded in.

Stock speculation is therefore a development of modern business, although the taking of long risks in trade is as old as commerce itself; and Homer relates how after the combat of Hector and Ajax, the fleet arriving from Lemnos' strands discharged cargoes of wine, which were sold to the hosts of warriors in exchange for brass, iron, oxen, and slaves. This was truly a great speculation.

According to Macaulay, the term "stock-jobbers" was first used in England in 1688, and he gives an entertaining account of the beginnings of the English stock-market at that time. A multitude of new companies, genuine and bogus, were organized, and an active speculation in their shares set in, the first boom in industrials of which we have any account. In 1693 a play was produced satirizing stock-brokers. Shakespeare, years before, had used the word "broker" as many as six times, but not as referring to dealers in stocks. "Time bargains," "bulls," "bears," "puts," and other technical terms of speculation were first used at the end of the seventeenth century and at the beginning of the eighteenth. So large became the unorganized market for securities, that in 1697 Parliament enacted a law to check the evils of speculation, and providing a system of licenses for brokers. Three or four years later Daniel DeFoe, in one of his pamphlets, attacked stock-jobbing.

The First Stock Panics.—This early mania for stock

speculation reached its height at nearly the end of the first quarter of the eighteenth century, in the promotion of the South Sea Company in England and of John Law's Mississippi Company in France. The collapse of these two bubble companies caused the world's first great panics in 1720. Guizot, in his history, gives a short but interesting account of the career of John Law, and of the intense excitement created in Paris by his bold financial conceptions. It was found necessary to close the entrances to Quincompoix Street, where the Paris brokers had their headquarters, in order to put a stop to the feverish tumult arising from desperate speculation. So many immense fortunes were won and then lost at that time that this ditty was everywhere sung in the streets:

On Monday I bought share on share;
On Tuesday I was a millionaire;
On Wednesday took a grand abode;
On Thursday in my carriage rode;
On Friday drove to the opera ball;
On Saturday came to the pauper's hall.

Shortly after the failure of John Law the Paris Bourse was legally founded, in 1726, but the "Change de Paris," out of which it may be said to have sprung, had a history running back to 1304.*

The English Parliament passed an act to prevent stock-jobbing in 1734, and forty years later another act was passed to prevent short selling. For nearly a century the curb market existed in 'Change Alley in London, and on July 5, 1773, the London Stock Exchange was formed. Thus the complicated machinery of the money- and stock-markets, the banks, the exchanges, and the

* For further information consult E. Vidal on History and Methods of the Paris Bourse.

processes of speculation are importations into Wall Street. This country has improved, has Americanized them, but did not originate them.

Beginnings of Wall Street.—Less than forty years after the organization of the London Stock Exchange a stock-market began to develop in Wall Street. In the United States, as well as in England, a craze for speculation had sprung up after the long war of the American Revolution.

The struggle for independence had strained the resources of the colonies to the utmost, and much suffering had been caused their people. But with the revival of commerce after the war better times set in. The first Congress, sitting in Federal Hall, on Wall Street, had issued bonds, called stock, to assume the war debts of the States, and about \$80,000,000 of securities were thus offered to the public. Other stocks had also been issued. In December, 1781, the Bank of North America had been incorporated in Philadelphia. Less than three years later, in February, 1784, a meeting of merchants was held to establish the Bank of New York. Hamilton drew up the plan and constitution of this bank, the first to be founded in this city. Among the places at which subscriptions were received was the office of William Maxwell, No. 4 Wall Street. In 1791 Congress passed, and Washington signed, Hamilton's measure for the establishment of the first United States Bank.

Speculation in the securities thus created set in. Wall Street became a market for them. It is recorded that early in 1792 there was an office for the public sale of stocks at No. 22 Wall Street. A stock list of that year gives quotations of 6 per cent. United States stock, and of the shares of the United States Bank and the Bank of North America. A number of men engaged in the business of buying and selling these stocks on commission.

Their favorite meeting-place was near a buttonwood tree which stood in front of No. 68 Wall Street. In 1792 Leonard Bleeker and 23 other brokers, as a result of a meeting held at Corre's Hotel, entered into an agreement "solemnly promising and pledging" themselves "not to buy or sell any kind of public stock at a less rate than $\frac{1}{4}$ per cent. commission on the specie value." The date of this agreement was May 17. This was the earliest beginning of the Stock Exchange, although there was no regular organization until twenty-five years later. With this agreement may be said to have begun the history of Wall Street as the seat of the Stock-Market.

The whole country then contained about as many inhabitants as the State of Ohio now. New York had a population of 33,000, and about 3,400 dwelling-houses. The settled part of the city did not extend above Chambers Street. Wall Street, so called from the old stockade, or wall, that protected the early Dutch city from the Indians, was in 1792 an important street. The City—afterward called the Federal—Hall had been erected there in 1699, on the present site of the Subtreasury, and here Washington had been inaugurated as President in 1789. Hamilton lived nearly opposite, not far from the corner of Broad Street. The lower part was even then given up to trade, but the upper part was a parade-ground of fashion, and many leading families had their residences there. Trinity Church then, as now, stood on Broadway facing Wall Street.

Organization of Chamber of Commerce.—As early as 1752 the merchants had a meeting-place, or Exchange, on Broad Street near Pearl. In 1768 the Chamber of Commerce was organized in the long room of Fraunce's Tavern, a building still standing; and it is of interest to note that questions of money engaged its earliest attention. In 1786 the Chamber protested in vain against

the State issuing irredeemable paper money as legal tender. In 1794 the merchants established the Tontine Coffee-House on Wall Street, and this continued the center of the business life of New York until 1827. Here the stock-brokers met for some time.

The first financial machinery required by the new country was banks, and the first great lesson taught by these institutions, as has been well said, was punctuality. The value of time as an asset in business became more and more appreciated. The success of the Bank of New York led to the organization of the Bank of the Manhattan Company, in the starting of which Aaron Burr was largely instrumental. From 1792 to 1801 the number of banks increased from 3 to 23, with a total capital of \$33,550,000. A few fire and marine insurance companies had also been organized. The supply of securities available for investment and speculation made therefore quite a stock-market. The following advertisement, which appeared in the first issue of the "Evening Post," November 16, 1801, gives an idea of the dimensions of this market:

PRICES OF STOCKS.

6 per Cent. Funded Debt.....	98 $\frac{1}{2}$	per Cent.
3 per Cent...do....do	56 $\frac{1}{2}$	a 57
8 per Cent. Loan	112 $\frac{1}{2}$	
6 per Cent. Navy Loan.....	par.	

BANK STOCK

United States Bank	143 a 143 $\frac{1}{2}$	p. ct.
New-York (dividend off)	131 $\frac{1}{2}$	
Manhattan	132	

INSURANCE SHARES.

New-York Insurance Co.	128	per cent.
Columbian....ditto	137 a 138	
United.....ditto	118 a 119	

Bills of Exchange at 60 days sight.

On London	100 a 101 per cent.
On Hamburgh	36 a 38 cts. p. mk. b.
On Amsterdam	40 cents per guilder.
<i>E. BENJAMIN, Stock and Exchange Broker,</i>	
<i>No. 50 Wall-Street.</i>	

November 14.

At this time all the banks and insurance companies but one, and the Chamber of Commerce, were located in Wall Street, then, as now, the financial center. As the banks were paying 15 to 18 per cent. dividends, there was no small demand for their stocks. With the growth of the country and the rapid settlement of what is now known as "the Middle West," which was then the frontier, new banks were created, and the speculation in their shares increased. The history of Wall Street from this time becomes practically the history of the agricultural, industrial, and commercial development of the United States.

Distress in 1812.—The banking capital of the country in 1812 was more than \$70,000,000. In this year the second struggle with England began, and the long closing of the ports and the cost of the war caused much distress. The Government had difficulty in floating a war loan. The bankers held a meeting at the Manhattan Bank on August 22, and took measures for their protection. Thus, a hundred years ago, the bankers realized the importance of concerted action in financial crises. During this panic—the first of any importance from which Wall Street suffered—90 banks in different parts of the country failed. The war over, a new period of expansion set in. The charter of the first United States Bank having expired, the second bank of that name was incorporated in 1816, and for nearly a quarter of a century this institution virtually controlled the course of the markets.

Organization of the Stock Exchange.—Speculation in

bank stocks had become so extensive that it was necessary to organize the stock-market into an exchange. and in 1817 the brokers who, until then, had been working under the agreement of 1792, formed an association under the name of the New York Stock and Exchange Board. This was the second great addition to the mechanism of the financial markets, the first having been the banks. The members of the Board agreed not to give public information of the names of buyers and sellers of stocks. At this time the outstanding Government securities amounted to \$123,000,000. State and city bonds had also been issued, and many new banks and insurance companies formed. In 1818 the records of the Exchange show that 29 different issues of securities were dealt in, including the stocks of 10 banks and 13 insurance companies. A big speculation was for years carried on in the stock of the United States Bank.

In 1807 Robert Fulton succeeded in applying steam-power to navigation on the Hudson River. This achievement, together with the digging of canals, resulted in a wonderful extension of inland commerce. New companies were formed, and a further expansion of the stock-market took place. In New York alone, companies having a capital of \$52,000,000 were organized in 1824. In the same year 624 new stock companies were incorporated in Great Britain. There was speculation in New York not only in stocks but in bonds, mines, and cotton. The mechanism of Wall Street had to be enlarged. In 1820 the constitution of the Stock Exchange was revised. Definite rates of commission for Government bonds, stocks, mortgage loans, and foreign and domestic exchange were adopted. A rule of the Exchange prohibited fictitious, or what are now called "wash," sales. In 1821, when the Morris Canal shares were offered to the public, they were subscribed for twenty times over.

The newspapers began to devote considerable space to Wall Street. The *Daily Advertiser* of April 10, 1822, referring to the news just arrived by ship, that the British 5s were to be reduced to 4 per cents, expressed regret that the price of our stocks should be regulated by the jobbers of 'Change Alley in London.

Commercial Supremacy of New York.—The completion of the Erie Canal in 1825 established the commercial supremacy of New York in the western hemisphere. Up to this time Philadelphia had been the chief market of the country. There, as has been seen, the first bank was organized in 1781. There were the headquarters of the all-powerful United States Bank, under the eventful presidency of the brilliant Nicholas Biddle. There also, very early in the nineteenth century, the first American Stock Exchange was formed, with Matthew McConnell as president, in the old Merchants' Coffee-House. It is related that before the New York Exchange was established the brokers sent a delegation to Philadelphia to get a copy of the constitution of its Exchange, and information as to its methods of business. But New York soon forged to the front. Its population and commerce outstripped Philadelphia's, and the power of its banks and stock-market was felt in all the land. London bankers began to establish branch houses in Wall Street. In 1825 the still existing house of Brown Brothers & Company was formed there, as an offshoot of Alexander Brown & Sons of London. In 1837 the Rothschilds appointed August Belmont as their representative in New York, a connection their successors have maintained ever since.

Railroad Securities.—The Stock Exchange in 1827 moved into the Merchants' Exchange Building, which had just been erected on the site where the City Bank now stands. The city had then a population of nearly 200,000. There were 16 banks, and the local

branch of the United States Bank occupied the building where is now the Assay Office. Two events occurred in 1829 of supreme importance to Wall Street. One was the inauguration of Jackson, who immediately began his memorable war on the United States Bank. The other was the application of steam to land transportation. The first train moved by a locomotive was operated in that year. By 1830 the railroad mileage became 30, and eleven years later it amounted to 3,361. Railroad stocks immediately became the object of speculation. In 1830 the first railroad stock—that of the Mohawk and Hudson—was put on the Stock Exchange list. Eight years later “Yankee rails,” as they were called, were introduced into the London market, the first security of this kind to be traded in being the bonds of the Camden & Amboy Railroad. American stocks, however, had long before that time been speculated in in London. The official list, according to Charles Duguid, contained the names of about 60. The panic of 1837 ended the existence of most of them. A New York paper of August 3, 1835, printed, as news, the London quotations of 15 American stocks on June 23. Investment and speculation in railroad securities now became the chief business of Wall Street, and have so continued until this day, although the “industrials” are pressing them in the race for supremacy.

Panic of 1837.—The fierce struggle between Jackson and the United States Bank, culminating in the panics of 1837 and 1839, makes one of the most interesting chapters in the political and financial history of the country. During the ten years from 1830 to 1840, Wall Street was the scene of much excitement and turmoil. The speculation of that period was, in proportion to the resources of the country, as active as that of the present time. There were daring operators then as now. Jacob

Barker, for instance, undertook in 1834 to insure the non-removal of Government deposits from the United States Bank until Congress should meet. He demanded a premium of 25 per cent. A corner in Morris Canal and Bank stock in 1835 was the talk of the town. In July and August of the same year 64,000 shares of the Harlem stock were sold for future delivery, although the actual issue of stock was only \$7,000.

The newspapers now began to pay much attention to the transactions in Wall Street, and regular market reports appeared. On May 13, 1835, the *Herald* then published at No. 20 Wall Street, contained the following:

Stocks—Yesterday the fancy stocks took a tumble of from 2 to 4 per cent. on some descriptions, the railroads especially. Money is beginning to get scarce, and there is some fear that the banks mean to curtail. This impression does not prevail generally.

SALES AT THE STOCK EXCHANGE

110 shares	East River Insurance	99
25 "	Manhattan Gas Company.....	129 $\frac{3}{4}$
50 "	" " " " on time.....	100
150 "	Mohawk Railroad Company	126
500 "	Utica and Schenectady, opening.....	128
350 "	" " " " "	128 $\frac{1}{2}$
250 "	Jamaica Railroad	189
25 "	United States Bank	112 $\frac{1}{4}$
160 "	Union Bank	122
40 "	" " " " "	121 $\frac{3}{4}$
100 "	Delaware and Hudson	112 $\frac{1}{4}$
450 "	" " " " "	112 $\frac{1}{4}$
200 "	" " " " "	112 $\frac{1}{4}$
310 "	Harlem Railroad	106
550 "	" " " " "	105 $\frac{1}{2}$
100 "	" " " " "	105 $\frac{1}{2}$
200 "	" " " " "	105 $\frac{1}{2}$
51 "	Dry Dock Bank	150
50 "	" " " " "	149 $\frac{1}{2}$

Six days later the same paper said:

A most active business is doing in stocks. The small bite of

English news—the probability of stable government on the reform principles—has given additional confidence to our moneyed men.

The next week the same writer informs us:

Stocks went up generally yesterday 2 to 3 per cent. No cause is assigned. The chief of the Hebrew interest dipped deeply. It is said his deposits amounted to \$500,000 a day—a second Rothschild, truly. The bears' turn to-day. The United States Bank increased its loans nearly \$2,000,000 during the month of April, whereat the *Washington Globe* lets off a large quantity of thunder. No one will complain at money being plenty, but when the day of payment comes it is almighty awful.

The sales of June 26 were “very large.” They amounted to 7,875 shares. In Philadelphia, two days before, the transactions were 2,279. There were crowds in Wall Street then as now. On March 10, 1836, it was said that “Wall Street was impassable.” During this year the Stock Exchange appointed a committee, composed of Messrs. Ward, Coit, Nevins, and Le Roy, to investigate the recent speculations in Harlem stock, and it was said by a financial writer of that day that “the system so much indulged in of late of time bargains and cornering will probably be sifted to the bottom. The recent operations in Morris Canal stock, the Harlem Railroad, and the Montauk Railroad have been a series of puzzles to the community, as much so as the roulette table or the faro-bank to the uninitiated in gambling.” The panic of 1837 struck Wall Street the preceding year, as on October 23, 1836, nearly a dozen failures were announced in the Street. The panic swept over the entire country, and was felt as severely in England as here. New York bankers, at a meeting May 9, resolved to suspend specie payments. From 1837 to 1839 there were 33,000 failures in the United States involving a loss of \$440,000,000.

Jackson triumphed in his contest with the United States Bank. This institution after its Federal charter expired, continued in business under a Pennsylvania charter, but finally, in 1841, passed out of existence altogether. Philip Hone, in his diary, says that the losses entailed by the failure of this bank equaled even those of the great fire of December 16, 1835, and he declared it meant "an utter destruction of American credit in Europe."

The *American* of November 25, 1841, gives the following account of the depreciation in prices:

To convey an idea of the immense amount of money sunk in stocks within the last three years, we give a list of a small portion only of those bought and sold at our stock board alone:

	PRICES.	
	Within 3 years past.	Present.
United States Bank	122½	4
Vicksburg Bank	89	5
Kentucky Bank.....	92	56
North American Trust	95	3
Farmers' Trust	113	30
American Trust	120	Nothing.
Illinois State Bank	80	35
Morris Canal Bank	75	Nothing.
Mohawk Railroad	76	60
Paterson Railroad	75	53
Harlem Railroad	74	18
Stonyton Railroad	70	23
Canton Company	54	23
Long Island Railroad	60	52

The great fire, to which allusion has been made, destroyed 648 buildings in the lower end of the city, including the Merchants' Exchange, in which the Stock Ex-

change had its Board-Room. The Exchange took up its quarters temporarily in Howard's Hotel, No. 8 Broad Street. The fire was followed by a general rebuilding, which transformed the appearance of the financial district. Former Mayor Philip Hone walked down Wall Street, July 13, 1842, and the same evening recorded his impressions in his diary, as follows:

The Subtreasury Building.—The splendid edifice fronting on Wall and Pine Streets is now entirely completed, and has been occupied as the New York Custom House, in all its manifold and complicated departments, since the 1st of May. The building was commenced in May, 1834, and the edifice furnished with its furniture completed in May, 1842; cost, \$985,000. The statement of the cost of this magnificent winding-sheet of departed commerce is taken from an elaborate and well-written description published in the *Commercial Advertiser* of this afternoon. A stranger walking down Wall Street from Broadway would laugh heartily at these lugubrious expressions of mine. With his back to "New Trinity," the most beautiful structure of stone in America, he passes the Custom House, which cost \$1,000,000, eight or ten banks, each a palace for the worship of Mammon, and the Exchange with a portico of granite columns such as Sir Christopher Wren had no notion of. These, with the brokers' offices and the seats of money-changers, some of which cost enormous sums, would convey to the mind of the wayfaring man an image wholly different from that of commercial distress and pecuniary embarrassment.

"New Trinity," of which Mr. Hone speaks, has become "Old Trinity." The "New Custom House" is now the Subtreasury. The Merchants' Exchange, which later became the home of the Custom House, has now been completely transformed into the City Bank, and the seat of customs is removed to the great building at Bowling Green.

New Birth of Wall Street.—Mr. Hone's expressions were indeed lugubrious; and posterity, which would not think of laughing at him, laughs at them. For, even as

Mr. Hone wrote, the new birth of Wall Street had taken place. Through the labor of panic and the baptism of fire, it was now rapidly growing into the stature and character of to-day. Wall Street soon became no longer a mere street. Its name covered a district. The business of the stock- and money-markets began to overflow Wall into Broad, New, and other neighboring streets. The fall of the United States Bank had brought to an end all pretensions of Philadelphia to supremacy in the financial markets. In the convention of bankers held in April, 1838, to consider the business situation, the New York bankers displayed the greatest spirit and courage. The convention decided to resume specie payments the following January, but the New York banks resumed May 16. "New York," says Prof. W. G. Sumner, writing of this time, "adopted the policy of severe contraction, prompt liquidation, and speedy recommencement. Philadelphia adopted that of relaxation, indulgence, delay, and prolonged liquidation." It was in 1838 also that the State of New York abolished the practice of special charters for banks, which had given rise to so many scandals and abuses, and adopted its admirable free banking law, that became the model on which, nearly a generation later, the National Banking Act was drafted. The *Evening Post* of April 18, 1838, said in an editorial, that this law "puts up a barrier against the practice of banking by special charters which we trust will never be removed." From this time the financial supremacy of Wall Street, in this country, has never been shaken.

In 1842, Morse, who seven years earlier had invented a recording instrument, built a submarine cable from Governor's Island to the Battery. Two years later, in 1844, the first land telegraph-line was constructed. Hardly any other event has added more to the influence of Wall Street. In this same year was formed the law

firm of Charles E. Butler and William M. Evarts, which has ever since been one of the notable institutions of the Street, and which was one of the first of the class of corporation law firms that have now become an indispensable part of the Street's machinery.

The Subtreasury System.—With the fall of the United States Bank there was a change in the financial policy of the Government, leading, in 1846, to the establishment of the Subtreasury system which exists to-day, although now the foremost financiers are advocating its abolition. The first Subtreasury was opened on Wall Street in this year.

Bank Clearing-House.—In 1853 the Bank Clearing-House was organized, being first located at No. 14 Wall Street. This has increased the facilities of Wall Street and augmented its safeguards as has no other part of its mechanism. In the same year the Assay Office was established; and the Corn Exchange, the forerunner of the present Produce Exchange, was incorporated.

The discovery of gold in California and Australia increased the world's wealth so much that there was an immense expansion in investment and speculation. Railroad construction proceeded at a rapid rate; money poured into the banks, and the banks lent their credit to the promotion of new enterprises and new companies. Instead of "an utter destruction of American credit in England," it is computed that the amount of American stocks held abroad in 1852 represented a value of \$261,000,000.

At this time the methods of the Stock Exchange were primitive as compared with those of to-day. Each member of the Board had his seat, and old cuts show that the wearing of tall hats was the fashion among brokers. Much business was transacted in the Exchange and on the curb. The *Bankers' Magazine* of November 24,

1856, reported that "the aggregate transactions during the past four weeks were exceedingly large, aggregating nearly one million shares."

Panic of 1857.—But overspeculation, following the enormous production of gold, and the abuses of credit in the promotion of new railroad and other companies, together with tariff disturbances, brought on the panic of 1857, which a writer of the period said "was an explosion without adequate cause or premonition." This was precipitated by the failure of the Ohio Life and Trust Company, a Cincinnati concern having a branch office in Wall Street. It had made large advances to Western railroads. A few men still active in Wall Street remember August 24, 1857, when this institution closed its doors. "The failure," said the *Herald* of that day, "took the Street by surprise. While the public were looking for collapses among railroad companies, they seemed to lose sight of banking institutions." Two days later the *Philadelphia Public Ledger* said: "The times are sadly out of joint, and the effects of a bad system are daily developing themselves. The banks have been carrying full sail, the country has been importing and individuals living far in advance of capital and production." The *New York Times* declared that "the New York Stock Exchange as at present managed is little more than an enormous gambling establishment," which reminds one of some of the indiscriminate attacks made on Wall Street at the present time. All the banks, except the Chemical, suspended specie payments October 14, but resumed two months later. Wall Street was shaken by the shock. From August 22 to October 13, Reading declined 40 per cent., Delaware & Hudson 40, Illinois Central bonds 48, Park Bank stock 44, American Exchange Bank 55½. The size of the stock-market is shown by the sale of nearly 71,000 shares in one day.

During the Civil War.—During the whole period of the Civil War Wall Street was like a boiling lake of excited speculation. The financial situation became so strained that even before Lincoln's inauguration the bankers met at the Subtreasury and resolved to suspend specie payments. The first issue of Clearing-House loan certificates was made at this time, and from 1860 to 1864 a total of \$59,159,000 were issued, the largest amount outstanding at one time being \$21,960,000 in 1862. Before the war was opened the National debt was under \$65,000,000, but in 1866 it amounted to \$2,773,000,000. This enormous issue of bonds was floated for the most part in Wall Street, and this was the most extraordinary of all the legitimate achievements of the market. The credit of the country was so low that it was very difficult to float the first loan. The Chamber of Commerce issued an appeal to capitalists to invest in the bonds, and Secretary Chase visited the Street and conferred with bankers in the interests of the loan. In the course of the war the Legal-Tender Act was passed, and in 1863 the present National banking system was established—the first National bank being founded in June of that year. To the National Banking Act, which made New York a central reserve city where half the reserves of the banks in the rest of the country could be kept on deposit, Wall Street owes no small share of its present power. It has augmented vastly its financial resources.

At the outbreak of the war the Stock Board was still a close corporation, conducting its operations in secret. Quotations were carried by hand from office to office. Each member had a particular seat in the Board-Room; there were less than a hundred members in attendance, and on account of persistent blackballing it was hard to get elected to the membership. Speculation overflowed the regular Board. The curb market became very

active. An unofficial adjunct to the Board was started in the next room, and there were extensive arbitrage dealings between them. The market opened on the Street at eight o'clock and continued all through the day downtown, and at night in the corridors of the Fifth Avenue Hotel, and at a later period at an evening exchange. As the war progressed the speculation grew, and the total sales from early morning until midnight were on an enormous scale. At this time the rate of commission was reduced from $\frac{1}{4}$ to $\frac{1}{8}$ of 1 per cent. In 1865 the Exchange prohibited its members from attending the up-town night exchange. Meanwhile so large was the trading, and so exclusive the regular Exchange, that in 1864 the Open Board of Brokers was organized, and continued in existence until 1869, when consolidation with the old Board took place, creating the present Stock Exchange with its admirable system of government and rules for the transaction of business.

Speculation in Gold.—Gold became the football of speculation. The first premium on gold was quoted in January, 1862, and it was immediately dealt in the same as stocks. The Government tried in vain to prohibit speculation in the metal. Speculation in gold was branded as unpatriotic, but to no purpose. Legislation was enacted by both the State and the United States in 1863 to prohibit the banks from lending money on gold or bills of exchange, and in 1864 Congress prohibited transactions in gold except for strictly cash delivery at the regular offices of those dealing in it. But restrictive measures served only to advance the premium and failed to stop speculation, and the laws were repealed. In 1864 the Gold Exchange was organized. The same year, to facilitate deliveries, the Bank of New York arranged for special gold deposits, checks on which became good deliveries for sales of gold. Three years later the Gold

Exchange Bank was organized as the Clearing-House for gold transactions. The Gold Exchange continued until 1877. All speculation in gold ceased on the resumption of specie payments in 1879.

When it is remembered that the immense business transacted during the war period was done without the aid of the stock-indicator, the telephone, the cable, and the Stock Clearing-House, there is good cause for astonishment. Stock-Exchange records of complete stock transactions go back only to 1875. Before that only sales on calls were reported. In 1868 the official sales on call at the two Boards were 19,713,402 shares of stocks and \$245,245,240 par value of bonds, but, according to a contemporary estimate, these sales only represented one-tenth of the total speculation of the Street, which therefore amounted to more than \$20,000,000,000 a year. Comparing this with the records of 1906, when the transactions in stocks and bonds aggregated about \$30,000,000,000,* it is seen that speculation a generation ago was exceedingly active.

Tickers and Telephones.—It was not until July, 1866, that Cyrus W. Field finally succeeded in his cable enterprise, and in the following month London prices began to be regularly received by cable in New York. Arbitrage transactions soon started. The next year the stock-indicator was adopted. Telephones were introduced in 1878. The Stock Clearing-House was established in 1892, this being undoubtedly the most important contribution to the mechanism of the Street since the organization of the Bank Clearing-House forty years earlier. It has expanded indefinitely the facilities of the stock-market.

* These figures for 1906 represent the transactions of the New York Stock Exchange. The speculation in the Consolidated Stock Exchange, on the "curb," and in the bucket shops should be added to make the comparison with 1868 more accurate.

Modern Wall Street.—With the consolidation of the Stock Exchange and the Open Board of Brokers in 1869, we enter upon the history of Wall Street practically as it exists to-day. Although more than a generation has passed, thirty-seven of the present members of the Exchange were elected in or before that year. The purpose of this book is to describe the present rather than the past; but since it is necessary to know something of its history in order to understand the work of Wall Street, this sketch of the beginnings of its stock- and money-markets is given. But the events of the past forty-three years can only be touched upon lightly.

The theme is indeed a tempting one. The period is crowded with dramatic episodes. Mighty enterprises have been launched. Great deals have been planned. Enormous speculations have been carried on. Panics have convulsed the Street. Immense fortunes won and lost have startled the world. The period immediately after the Civil War was especially prolific in speculative sensations. The harvest of war was wild extravagance, looseness of morals in politics and business, base frauds, and crime. But this period was also a time of reconstruction. The country put its shoulder to the wheel of industry and there was a notable development of the national resources. In May, 1869, the first railroad train moved across the continent. The Atlantic and the Pacific were united by bonds of iron. The Transcontinental stocks then became the playthings of speculation.

The Gold Conspiracy.—It was in 1869 that the "Gold Conspiracy" took place, culminating in the convulsion of Black Friday, September 24, which was undoubtedly the most extraordinary day in Wall Street history. A committee of Congress, of which James A. Garfield was chairman, investigated this conspiracy, and its report and accompanying testimony constitute the best account

of it. Jay Gould, arguing that an advance in the premium on gold would stimulate exports of wheat and thus benefit the farmer, believed that the Treasury would suspend its sales of gold, and this, in fact, was for a time the Treasury policy. Therefore he got up a bull pool in gold and advanced the premium from 132 to 144. Other members of the pool liquidated, leaving Gould and his partner, James Fisk, to carry on the deal. Gould was assisted by the Tenth National Bank, in which he had a large interest, and which overcertified his checks \$7,500,000 in one day. Garfield called this bank "A Manufactory of Certified Checks." There was a bold and wicked attempt to connect the Grant Administration with the conspiracy, but it did not succeed. The corner was broken by President Grant and Secretary Boutwell, who gave the order to sell gold. Boutwell's telegram, "Sell four millions gold and buy four millions bonds," completely shattered the corner. "No avalanche," it was said by a writer of the day, "ever swept with more terrible violence than did the news of this telegram into the Gold Room." The excitement rose to the highest point. Old operators lost their heads and rushed hatless and half-crazy through the streets, their eyes bloodshot, their brains on fire. New Street was so crowded with excited people that it was a dangerous spot to stand in. The price of gold, which that morning had risen to 162½, fell to 133. The Gold Exchange Bank could not clear the gold transactions, which amounted to \$410,000,000. Clearances were suspended for a month, and dealings in gold for a week. Mr. Gould employed over fifty brokers in his operations. One of these was Albert Speyers, whose contracts, amounting to \$37,000,000, were repudiated. Smith, Gould, Martin & Company refused to make out a clearance sheet, but one was made up for them by a committee of the Gold Exchange, which

showed that they received \$20,630,000 gold and delivered \$7,500,000, leaving \$13,130,000 to be paid for.

“The malign influence which Catiline wielded over the reckless and abandoned youth of Rome,” said Garfield in his report, “finds a fitting parallel in the power which Fisk held in Wall Street, when, followed by the thugs of Erie and the debauchees of the opera, he swept into the Gold Room and defied both the Street and the Treasury.”

It was Black Friday that inspired E. C. Stedman, the banker-poet of the Street, to write his much-quoted poem beginning:

Zounds! How the price went flashing through
Wall Street, William, Broad Street, New!
All the specie in all the land
Held in one Ring by a giant hand—
For millions now it was ready to pay
And throttle the Street on Hangman's day.

The Erie Wars.—The Erie wars provided for years the chief sensation of Wall Street. Erie, Northern Pacific, and Reading have indeed been the objects of more speculation, the cause of more flurries and panics, and the victims of more receiverships and reorganizations than almost the entire rest of the railroad list put together. The history of Erie, from the time Daniel Drew entered the directory of 1852, to the time when by main force Gould was driven from the Presidency in 1872, would make a volume of absorbing interest. Charles Francis Adams made it the theme of two brilliant magazine articles soon after the events happened. Drew was in control of the road until 1868. For years Commodore Vanderbilt, who had obtained control of the Harlem, the Hudson, and the New York Central Railroads, fought desperately with Drew in the legislature, the courts, and the

stock-market for the mastery of Erie. In 1868 Drew lost, but Vanderbilt did not gain, control. The road then passed into the hands of Gould, who for four years made it the plaything of his Wall Street operations.

"Freebooters," wrote Mr. Adams, "are not extinct. Gambling is a business now where formerly it was a disreputable excitement. Cheating at cards was always disgraceful. Transactions of a similar nature, under the euphemistic names of operating, cornering, and the like, are not so regarded." During these twenty years of poor Erie's history securities were issued by the bushel, legislative bribery was freely resorted to, law was made another name for plunder, legal pandemonium existed, the courts ran riot. Injunctions and counter injunctions were issued. In the final uprising of the people that followed this period of rottenness in politics and business, two corrupt judges were driven from the bench. The Drew trick of issuing new stock and flooding the market with it, and then by various expedients preventing its transfer on the books, so as still to keep control of the property, was copied by Gould, a greater master of speculation than even he. "This," said Adams, "is the most extraordinary feat of financial legerdemain which history has yet recorded." The Stock Exchange finally made a rule requiring shares of companies to be registered, in order to prevent a repetition of this scandal, but Gould at first refused to comply with it, and Erie was for a time struck from the list. After Mr. Gould was driven from the Presidency under a revolt inspired chiefly by English stockholders, he was sued for \$9,700,000, which it was claimed he had converted to his own use from the assets of the road. Mr. Gould was under arrest for a short time, and finally made his famous "restitution," turning over, besides some valuable real estate, securities nominally worth \$6,000,000, but which, it was later re-

lated under oath to the Hepburn Railroad Committee, were not really worth over \$200,000.

Panic of 1873.—General Grant said, in 1869, that he thought there was a “fictitiousness about the prosperity of the country,” and he was right; but the collapse did not come until four years later. The panic of 1873 was precipitated by the failure of Jay Cooke,* the promoter of the Northern Pacific, and it caused the greatest distress throughout the country. Its severity in Wall Street is shown by the fact that the Stock Exchange closed its doors for ten days, and that there were seventy-nine stock failures. A long period of stagnation succeeded, but in 1879 the memorable boom that followed the resumption of specie payments was in full swing, and was checked only by the assassination of Garfield in 1881.

Panic of 1884.—Wall Street suffered most from the panic of 1884, although its effects were to a considerable extent felt throughout the country. This started with the failure of Grant & Ward and the Marine Bank, due to the dishonesty of Ferdinand Ward, the partner of General Grant. These were followed a few days later by the suspension of the Metropolitan Bank and George I. Seney. A remarkable incident of this panic was the failure of A. S. Hatch, then President of the Stock Exchange. A special election to fill Mr. Hatch's place had to be held in the midst of the excitement, resulting in the selection of J. Edward Simmons, who piloted the Exchange through the ensuing months of severe strain.

In 1890 a world-wide blow to credit was caused by the suspension of the Barings, of London, a blow more disas-

* The night before his failure Mr. Cooke entertained President Grant at his house near Philadelphia. Unaware apparently of the peril of his situation, the next morning he drove the President to the railroad station and then went to his office, where he discovered that he was a bankrupt. The annals of American business may be searched in vain for a more dramatic personal incident than this.

trous even than that of the failure of Overend, Gurney & Co. in 1866. There was a year of prosperity in 1892, but the next year a great commercial panic set in as the result of the free silver agitation.

Panic of 1893.—In the stock-market, the first notable event of 1893 was the collapse of the McLeod Reading Combination. This had been formed in 1892, and on the 11th of February of that year there had been a bull day in Reading which advanced to 65, with sales of 592,000 shares, the total transactions of all stocks reaching 1,446,915 shares, which for nearly seven years remained the "record" for one day's trading. But February 20, 1893, the combination went to pieces; Reading fell to 28½, and the day's sales amounted to 1,438,971 shares, of which 957,955 were Reading. On May 3 there was a heavy fall of stock prices, and the next day the collapse in Cordage caused three failures.

The events of the panic of 1893 do not call for recapitulation in detail here, though they should receive the earnest study of every investigator of financial history. For many months the Treasury was on the ragged edge of suspension of gold payments. The National debt had to be increased in order to buy gold. Europe dumped her heavy load of American securities on our market. Prices of all stocks collapsed like houses of cards. Thirteen stock-exchange houses suspended, and there were more than 15,000 commercial failures. Only the Clearing-House Loan Committee, composed of Frederick D. Tappen, E. H. Perkins, Jr., J. Edward Simmons, Henry W. Cannon, W. A. Nash and G. G. Williams, stood between the business of the country and universal bankruptcy. Wall Street never performed a more valuable service for the country.

Panic of 1895.—President Cleveland's so-called Venezuelan message produced the Wall Street upheaval

of December, 1895. Still suffering from the strain of the silver problem, with heavy exports of gold, the continued depletion of the Treasury reserve, making necessary another bond issue, the market broke under the added burden of possibility of war with England, which happily was avoided.

The McKinley Boom.—The election of 1896, resulting in a victory for the gold standard, ended the four years of depression in business, and the five years of what is known as "the McKinley boom" began. Confidence was restored, the crops were bountiful, the gold production was unprecedented, and marvelous prosperity filled the land. Even the Trans-Missouri decision of March 22, 1897, which declared that railroad pooling was illegal, only temporarily checked the revival, although it afterwards worked great changes in methods of railroad control, introducing "communities of interests," and holding or securities companies, with later still more important changes, the final results of which are not yet determined. The war with Spain, short and decisive, and bringing about the acquisition of the Philippines, actually augmented the boom; but in 1899 there was a reaction caused, first by ex-Governor Flower's sudden death, and later by the Boer War and the closing of the Transvaal mines. The passage of the Gold Standard Law of 1900 was the legitimate consequence of the verdict of the people rendered four years before, and which was confirmed by the re-election of McKinley. All previous records of bank clearings, stock and bond transactions, exports, manufactured products and volume of trade, were broken in 1901. The high-water mark both of Wall Street speculation and business prosperity was then reached. A strike of steel operators, a short corn crop, the contest for the control of the Northern Pacific, ending in the stock panic of May 9, and the assassination of

McKinley, any one of which, under other and ordinary conditions, might have spelled National disaster, did not materially disturb business interests, and only partially reduced the volume of speculation.

New giants had appeared in the speculative arena during this boom—men of daring, of originality, and of that gift of imagination which is as essential to the highest success in finance as it is in art, music, and literature. An era of big things opened for Wall Street. Great industrial companies were formed. Practically every large business was incorporated. The billion-dollar steel corporation was organized. Ten million-dollar banks were created and later, twenty-five million-dollar banks. American capital began to show signs of eagerness for other worlds to conquer, and stretched its hands across the sea.

Big Business and the Government.—The term “Captains of Industry” was applied to the great leaders in this national advance. But unprecedented prosperity brought with it new perils and new problems. In 1903, another era opened in Wall Street history, a new national issue—that of the big corporations, railroad and industrial, in their relations to the government and the people—arose, with results as far reaching as the preceding national issues of slavery, reconstruction and silver bimetallism. The beginning of the government suit to break up the railroad combination known as “the Northern Securities Company” may be said to have been the formal, visible opening of this era. The question of the measure and manner of the enforcement of the Sherman anti-trust law, the question of the degree of governmental regulation of railroad rates and railroad finances, the rapid extension of political control of business enterprise, commanded the attention of the country, and soon began to disturb the markets and interfere with the free

play of capital. Wall Street, as the center of the money-market, and as the financial headquarters of the larger corporations, inevitably came under attack; and the stock-market naturally reflected the varying course of the struggle that ensued. The struggle involved not only necessary reforms in the administration of corporate business, but what was far more fundamental to the future development of the country, the degree of permissible co-operation in regulating and limiting competition, so as to reduce its wastes and provide for that centralization of administration deemed necessary for the peaceful development of home markets and the conquest of foreign markets. The effect of these domestic conditions was accentuated by a world-wide political and social unrest. An immense gold production, a universal uplift of prices advancing the cost of living, the development of an aggressive trade unionism and a growth of socialism in different forms, were incidents of the period from 1903 to 1912, and they augmented the uncertainties and disorders. They impaired confidence and retarded business enterprise.

Panic of 1907.—Out of these developments sprang the panic of 1907, with all the familiar phenomena of bank suspensions, mercantile failures, industrial depression, and decline of the security markets. It was the leadership of J. Pierpont Morgan, aided by another Clearing-House loan committee, which prevented a complete financial collapse.

From the effects of this panic there was a rapid recovery in 1909-10, followed by another period of reaction. The panic revealed again the need of a great central banking reserve under co-operative control, and this led to the creation of a Monetary Commission to study the banking and currency problem. The panic also revealed some weakness in the machinery of the stock-market,

and a commission was appointed by Governor Hughes to study the Wall Street system of speculation in securities and commodities. The result of this investigation was two-fold: it led to the removal of certain abuses, and the improvement of certain methods; and at the same time it demonstrated the substantial integrity and the economic value of the stock-market.

United States Supreme Court decisions in cases involving the enforcement of the Sherman anti-trust law compelled the dissolution of the Standard Oil and American Tobacco Companies, and brought about a change in the conditions under which "big business" could be legally conducted. Notwithstanding the political agitation of problems affecting the conduct of this "big business," important developments took place in the railroad, the industrial, the banking and the investment field during this period. There was further expansion in the size of banks and trust companies, and the admission into the New York Clearing-House of the most of the leading trust companies doing a banking business was a notable strengthening of the financial structure. The brilliant plans of the ambitious Edward H. Harriman, although not fully realized at the time of his death, produced some of the most remarkable and dramatic incidents of the decade, and contributed largely to the increased efficiency and strength of the American railways.

In this bird's-eye view of the evolution of Wall Street little notice has been taken of persons. It would be pleasant, if space permitted, to retrace the footsteps of Alexander Hamilton in the Street, and note the stir made by the frequent visits of Nicholas Biddle. How delightful must have been those evenings spent by the bankers and brokers of ninety years ago in Baker's Hotel, in Wall near New Street, at the meetings of the social organization called "The House of Lords," of which Bernard

Hart was President! Many an important deal was discussed and arranged there.

Across the broad stage of Wall Street has passed a long procession of notable men; men of achievement as well as men of destruction; men who have added to the wealth and happiness of the country, and men whose only claim to fame was the audacity of their operations. In 1820 Nathaniel Prime and John Ward appear to have been the most active Wall Street speculators. Jacob Barker, the early Rothschild of the market; Jacob Little, the first of the long line of "Napoleons of Wall Street," who made and lost nine fortunes, and was the first to invent the convertible bond trick; Simeon Draper, whose death in 1853 caused a flurry; Daniel Drew, the great speculative director; Commodore Vanderbilt, creator of the New York Central Railroad System; his son, William H. Vanderbilt, whose sudden death, while conferring with Robert Garrett, caused much excitement in financial circles; Jay Gould, both builder and wrecker of values, at once bold and conservative, and at all times subtle, adroit, and able; James Fisk, whose sensational career had a sensational ending in his murder by Stokes; Russell Sage, for years the Street's largest individual money-lender, and a factor in corporations and speculations for half a century; David Dow, Cyrus W. Field, Horace F. Clark, William S. Woodward, Alexander Mitchell, William H. Marsten, Anthony W. Morse, Leonard Jerome, and William R. Travers, the wit of the Street; Henry Clews, the veteran, who has embodied his experiences of fifty years in two volumes of reminiscences; Jay Cooke, the first promoter of the Northern Pacific, who lived to see his dreams of its future greatness realized; Henry Villard, who completed the road by driving "the golden spike," and who organized the first big "Blind Pool"; George I. Seney, who promoted the "Nickel Plate," and

astonished the Street with the way in which he watered its stock and succeeded in unloading the property on the Vanderbilts; Addison Cammack and Charles F. Woerishoffer, long the most noted bears of the stock-market; Henry N. Smith, once partner, but later the rival and enemy of Gould; William Heath, who went down in Smith's failure; S. V. White, astronomer and lawyer as well as broker, and once the noted manipulator of Lackawanna; James R. Keene, who long held a unique place in the stock-market as the skillful manager of colossal operations for himself and for syndicates; Francis L. Eames, President and historian of the Exchange, and founder of its Clearing-House; J. Edward Simmons, the only man who served as President of the Stock Exchange, the Bank Clearing-House and the Chamber of Commerce; W. R. Vermilye, Donald Mackay, and Washington E. Conner; F. D. Tappen, the banker who took the helm in time of panic and piloted the ship of finance through the storm to a port of safety; R. P. Flower, the first leader in the McKinley boom; August Belmont, George J. Gould, W. K. Vanderbilt, George F. Baker, James Stillman, Henry W. Cannon, John D. Rockefeller, William Rockefeller, H. H. Rogers, E. H. Harriman, the so-called "Colossus of Roads"; Jacob H. Schiff, the noted Hebrew banker, and last, and perhaps the greatest, J. Pierpont Morgan, the only man who has ever carried to successful consummation a billion-dollar enterprise—these are some of the names that have made Wall Street famous.

During the past thirty years the architecture of the financial district has undergone a metamorphosis. Old structures have been torn down and new and towering buildings have taken their place, so that there is now little left as a reminder of the past except Trinity Church and the Subtreasury.

Accompanying this transformation in the outward form

of Wall Street there has been a like change in its inner life and spirit. A notable expansion and improvement in its facilities has taken place. The methods of the stock-market have been modernized. Greater safeguards against reckless and dishonest speculation have been adopted. New barriers have been raised against the ravages of panic. Speculation is at once bolder and better protected. The banks have increased their capital, augmented their resources, and by co-operation are able to present a solid front against the approach of disaster. What the future has in store no one can tell. Human nature changes slowly from century to century. There has been much even in recent conditions to remind one of the South Sea and Mississippi bubbles of two hundred years ago. The stock-market will no doubt continue to present the same strange contrasts of panics and booms, of intelligent investment and reckless speculation, of construction and of wrecking, of splendid achievement and of scandalous dishonesty. But unless the experience of the nineteenth century has gone for naught, Wall Street in the twentieth century will show forth far more of glory than of shame.

Stages of Market Evolution.—From this rapid review of the history of Wall Street, it is possible to trace the various stages in the evolution of its financial machinery.

First, men experienced the need, and discovered in the corporation the method, of co-operation in business. Next came the stock certificate, issued as evidence of partnership in the corporate enterprise. This afforded a new field for the investment of savings. As the demand for stocks increased, and new companies were formed, the certificates more and more became subject to purchase and sale. A market for securities thus developed. This was first on the street, but later it became necessary to organize it with by-laws and rules, and out of this the

Stock Exchange grew. There were so many buyers and sellers of stocks for investment, that fluctuations in prices became frequent, which led a number of persons to speculate in future values. This speculation expanded so greatly that, while it performed a valuable service in aiding in the distribution of securities and in making capital more mobile, it developed abuses, and at times so overloaded the credit structure as to cause a collapse. With the rapid conversion of all forms of business into stock companies, and the equally rapid growth of the stock-market, it was inevitable that the Stock Exchange should exist near the great banks and the Clearing-House, and that a big international market for credits and securities should develop in the leading commercial city of the country. It was inevitable also that there should be evolved in this market a code of rules and of ethics to insure as high a degree as possible of fair play, publicity, and security; and these rules have advanced, and will continue to advance, in their requirements, as business becomes more and more a standardized profession. The history of the New York stock-market, like the stock-markets of London and Paris, is closely identified with the history of commerce and of public finance.

REFERENCES

Some of the Sources of Information Consulted in Addition to Old Records, Newspapers and Documents

"History of Coinage and Currency in the United States," A Barton Hepburn, 1903.

"Men and Mysteries of Wall Street," J. K. Medbury, 1876.

"Fifty Years in Wall Street," Henry Clews, 1908.

"Wall Street Point of View," Henry Clews, 1900.

"Story of the Stock Exchange" (London), 1902.

"Ten Years in Wall Street," W. W. Fowler, 1870.

"Forty Years of American Finance," A. D. Noyes.

"History of the New York Stock Exchange," E. C. Stedman, 1904.

"Early History of Wall Street," O. G. Villard, 1897.

- "Financial History of the United States," Davis R. Dewey, 1903.
- "Thirty Years View," Thomas H. Benton, 1864.
- "Financial History of the United States," A. S. Bolles, 1884.
- "History of Banking," Edited by editor of the *Journal of Commerce and Commercial Bulletin*.
- "Chapters of Erie and other Essays," Charles F. and Henry Adams, 1886.
- "The Old Merchants of New York," Walter Barrett, 1885.
- "The American Commonwealth," James Bryce, 1891.
- "A History of the Bank of New York," 1884.
- Diary of Philip Hone, 1828-51.
- "History of the City of New York," Mrs. Martha J. Lamb, 1877.
- "The History of England," Thomas A. Macaulay, 1861.
- "The Outside Fools," Erasmus Pinto, 1877.
- "A History of Banking in the United States," William G. Sumner, 1896.
- "American Almanac," 1834-61.
- Bankers' Magazine*, 1846-1911.
- "A Week in Wall Street," By one Who Knows, 1841.

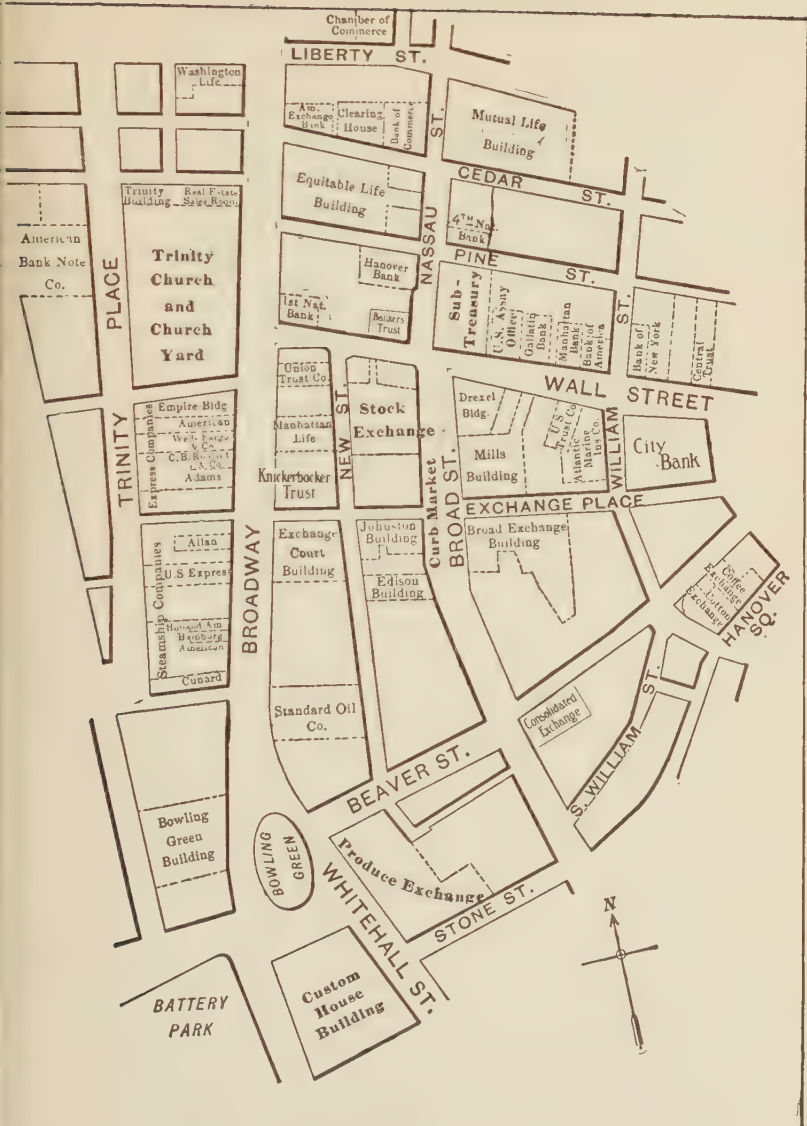
CHAPTER II

GENERAL VIEW OF WALL STREET

Wall Street is one of the shortest and one of the longest streets in the world. Geographically it extends from Broadway to the East River, only that part west of Pearl Street being occupied by banks, bankers and brokers. Financially, however, it reaches from London to Manila. It is a national and international thoroughfare.

As most commonly used, the name applies to a certain section of the city where the banks and the exchanges and the offices of the corporations which depend upon them are located. The offices of the Trustees of Columbia University and of the excellent Seamen's Friend Society are in Wall Street, but are far less of it than are many institutions that are located far away—as, for instance, the Chemical Bank, facing the City Hall, the general offices of the New York Central Railroad, at Forty-second Street, and the corridors of the Waldorf-Astoria Hotel, where the brokers and operators are wont to congregate in the evening, as in former years they assembled at the Fifth Avenue Hotel, and later at the Windsor.

“In Wall Street.”—A man is said to be “in Wall Street” who is engaged in business directly connected with the great exchanges and banks, and the banking houses and corporations in close affiliation with them. The telegraph has vastly extended the boundaries of the financial district. The banks have close affiliations with other banks and with individuals and corporations in all parts of the country. The brokers maintain branch offices, often with direct wire connections, in many cities and towns. A man living in Denver or Seattle may be



MAP OF WALL STREET DISTRICT

more truly "in Wall Street" than a resident of Brooklyn or Harlem.

Draw a line east and west from river to river across Manhattan Island, along the line of Fulton Street, and the territory south of it comprises the financial center. The city is only three-quarters of a mile wide at Fulton Street, which is only half a mile from the Battery; yet within this narrow district is concentrated more wealth, probably, than in any other like area in the world. The Stock Exchange stands about in the center, on Broad and New Streets, with a narrow wing facing on Wall Street. The Bank Clearing-House occupies a stately building on Cedar Street, between Broadway and Nassau Street. The Subtreasury stands on Wall at the corner of Nassau, facing Broad Street, and the Assay Office occupies the building adjoining on Wall. The Custom House, through which one-half of the commerce of the United States passes, long had its home in the old Merchants' Exchange building on Wall Street, corner of William, but now occupies a magnificent structure fronting Broadway at Bowling Green. Near the site of the new Custom House, at the corner of Beaver Street, stands the immense Produce Exchange building, occupying the ground where formerly was the first market of the old Dutch city. The Produce Exchange is devoted to transactions in grains and provisions. The Maritime Exchange, which, as its name implies, is the meeting place of ship brokers and others engaged in the shipping trade and in which representatives of 76 steamship lines entering New York are members, formerly had offices in the Produce Exchange, but now has a home of its own in Broad Street. During the rebuilding of the Stock Exchange, the Stock Board for more than a year occupied a part of the big Exchange room of the Produce Exchange. The Cotton Exchange, founded in 1870, and the largest institution of the kind

in this country, has a fine building at Hanover Square, on the site where Bradford printed the first newspaper published in New York. Close to the Cotton Exchange stands the Coffee Exchange. Within the financial district, the metal trade and the real estate interests have organizations representing them. In the settlement of estates many investment securities are sold at auction in the Real Estate salesrooms. On the corner of Beaver and Broad Streets stands the Consolidated Stock Exchange, where formerly there was a heavy speculation in oil, but which now does a large business in stocks, mostly in lots smaller than those traded in at the Stock Exchange.

The sugar trade monopolizes a large part of the lower end of Wall Street. In Pearl Street is concentrated a section of the tobacco trade. The metal trade gathers around the Metal Exchange, the cotton trade in and around the Cotton Exchange, and the grain trade in and around the Produce Exchange. The steamship and express companies are found on Broadway, below Wall Street. The fire and marine insurance companies center in Wall, Pine and Cedar Streets. Several of the life insurance companies, including the two largest, whose combined assets amount to nearly \$1,000,000,000, are also in this district. The Standard Oil Company has its headquarters in a building of its own in lower Broadway, and the Western Union Telegraph Company in a building at the corner of Dey Street.

In this financial district there are 29 National and State banks, of which 9 are on Wall Street; 30 trust companies, of which 6 are on Wall Street; the general or principal fiscal offices of 150 railroad corporations; 8 life, 38 fire and marine, and 38 other insurance companies; 9 safe deposit companies; 6 express, 21 telegraph, and 18 steamship companies; 42 coal, iron, steel, and copper companies; and of more than 200 large industrial, manufac-

turing, and other miscellaneous corporations. Every company whose securities are listed in the Stock Exchange has a transfer office within convenient distance of it. The brokers make their headquarters in the towering office buildings, those wonderful structures of steel, clothed in stone and marble, which have made the streets in the financial district a series of deep cañons. One of these buildings is said to contain more rooms than any other in the world and to house during the day over 11,000 persons. The private bankers, of course, have their elaborate establishments within this district. The house of J. P. Morgan & Company occupies the Drexel Building, at the corner of Wall and Broad Streets, which has the reputation of standing on the most valuable site per square foot of any real estate in New York. The curb market has been situated on Broad, just below Exchange Place, but has been obliged from time to time to shift its position.

The Chamber of Commerce.—The Chamber of Commerce of the State of New York, the oldest and most important institution of the kind in the world, occupies a stately building in Liberty Street, and its assembly hall, filled with portraits of leading merchants and bankers of former years, is one of the most beautiful in the country. No trading is carried on in the Chamber, and it is not a part of the credit, much less of the speculative, machinery of Wall Street. It is "the merchants' forum." Its special function is to promote and protect the interests of the commerce of the city and State; and its membership, while including bankers and brokers, is composed largely of merchants and manufacturers and officers of industrial and railroad corporations. But so closely is commerce bound up with the money and security markets by ties of mutual interest, the big merchants being directors in banks and corporations and the bankers hav-

ing, in many cases, an influential voice in the direction of the leading industrial and mercantile companies, that it is not easy to draw the line separating commerce from finance. This is not a thing to be deplored. It is the inevitable result of that community of interests which now unites the whole world of business. The Chamber of Commerce,* with its committees on Finance and Currency, Foreign Commerce and the Revenue Laws, Harbor and Shipping, Internal Trade and Improvements, Insurance, State and Municipal Taxation, Commercial Education, and Arbitration, has, since its organization in 1768, constantly labored for sound currency and banking laws, an equitable administration of the tariff, the extension of our foreign trade, the improvement of the harbor and terminal facilities, the maintenance of good insurance methods, the enacting of just tax laws, the encouragement of commercial education, the arbitration of mercantile disputes, the establishment of good municipal government, the promotion of world peace, the extension of philanthropy to different parts of the world suffering from great calamities, and the cultivation of that international hospitality which brings different nations and races closer together.

Those who look upon the financial district with suspicion and imagine that only selfishness and sordidness prevail there should examine these remarkable institutions, the Chamber of Commerce and the Clearing-House. They will discover high ethical standards, a lofty altruism, and an enlightened and earnest public spirit. Many

* In February, 1912, A. Barton Hepburn, President of the Chamber of Commerce and of the Clearing-House Association, said:

"The two most powerful influences in commercial and business affairs in this country are undoubtedly the New York Chamber of Commerce and the New York Clearing-House. We are located in close proximity, we serve practically the same community, and the same interests, and we are largely composed of the same membership in different form."

of the busiest men in the world give freely of their time (which is even more valuable than their money) in the performance of public duty on committees.

Wall Street is not only a clearing-house for credit and securities. It is also a clearing-house for art, for education, for philanthropy, and for religion, in all of which many of its leading men are deeply concerned, and its work in the promotion of these interests is scarcely less important to the country, than its work in its own special field of enterprise. The enemies of Wall Street insist upon judging it by its worst side. In all fairness it should be measured by the immense services it performs.

A Study in Billions.—More than a century ago the volume of Wall Street's business was easily computed in thousands. Later its transactions were in millions. To-day any sketch of the work of Wall Street must necessarily be a study in billions. Even the sum of \$50,000 paid out of the Treasury in 1792 by Hamilton was sufficient to afford some relief to the Street in a time of financial distress. It would be but a drop in the bucket to-day. In March, 1902, J. Pierpont Morgan, testifying in the Northern Securities case, spoke of a \$10,000,000 deal as if it were a small matter.

Object alike of fascination and fear, Wall Street is the best known and least understood street in America; object of fascination, because of the glamor of the great fortunes made and lost there; object of fear, because of its wealth and power. It is as mysterious to the outsider as a Masonic Lodge is to one who has never passed through its ceremonies of initiation. Like Masonry, Wall Street has its code of morals, its ritual or forms of doing business, its working tools, and a strange language which only the initiated can understand. Moreover, no Masonic Lodge is ever tiled more closely than is Wall Street, where, notwithstanding its immense deposits of

money and valuable securities, robbery is seldom attempted and still more rarely accomplished, so carefully is it policed.

It will be found that the nearer we get to the mysteries of Wall Street the less mysterious they appear. In truth, strange as may seem some of its terms and methods, nothing could be more direct or simple than the principles upon which it conducts its business.

Wall Street is to the United States what Capel Court and Threadneedle, Throgmorton, and Lombard Streets are to England, the seats of the stock- and money-markets. So rich is this country, so extensive its territory and so immense and varied its resources, that Wall Street's power is now recognized the world over as second only to that of London. American manufacturers are competing for trade in every market. American capital is employing itself in Canada and South America, has invaded London and Rotterdam, and is gradually spreading itself over Europe and Asia. The time can not be far distant, therefore, when the securities of the world will be represented in the markets of Wall Street as they are now in London. "The debtor nation," said Secretary of State Hay in his McKinley memorial address, "has become the chief creditor nation. The financial center of the world, which required thousands of years to journey from the Euphrates to the Thames and the Seine, seems passing to the Hudson between daybreak and dark." In view of the fact that the population of the Metropolitan district of New York now closely approaches, and in ten years promises to exceed, that of the Metropolitan district of London, this prediction does not seem so distant of fulfillment as it did when spoken.

Vastness and Conservatism.—Yet in spite of its greatness, there is a sense in which Wall Street is provincial. It has been said that "vastness is often the parent of nar-

rowness." The narrowness of Wall Street has a basis of reality, but it is more apparent than real. The vast extent of its interests leads some Wall Street men to view with indifference, and sometimes with contempt, the interests that lie outside of it. To that extent its narrowness is real. But Wall Street seems to multitudes of people to be narrow simply because it is not in sympathy with radical ideas. Vast interests bring heavy responsibilities. Wall Street is a conservative force in the country; and while it is not opposed to an orderly advance, it serves as a check upon rapid progress in dangerous economic and political experiments.*

* "Speaking from my own experience in Wall Street, I have no hesitation in saying, first, that men as a rule speak the truth in Wall Street in speaking of that which they know, and second, that there is wider dissemination of essential truth in Wall Street and a better general understanding of that truth, so far as facts and figures bearing upon securities are concerned than there is in other commercial and industrial communities with respect to their characteristic products that are bought and sold."

THOMAS F. WOODLOCK.

CHAPTER III

FUNCTION OF WALL STREET

New York is the gateway of the Nation's Commerce, and Wall Street has been likened to a toll-gate to pass which every product of the country must pay tribute. As no one likes to pay toll, this would account for much of the animosity so often manifested against the financial center. Yet someone must make, maintain and operate the various agencies by which the products of the country reach the markets, and it is right that the service should be paid for.

Transportation.—Wall Street is the directing head of the great system of transportation, using that term in its broadest significance, as including not only the railroads and steamships, but also the banks and exchanges, and all the other manifold agencies by which the products of the soil are brought to the homes of consumers in forms fit for human use. Without the products the race would starve. Without the facilities by which the products are moved and fashioned and financed, the products would not reach those for whom they are intended, and civilization would perish. It has been said that the world is never much more than a day distant from starvation; and the operation by which production is brought to the door of consumption by human agencies is so marvelous in its speed, accuracy and power, as to seem almost as much a miracle as the operations of nature fixed by divine edict. Wall Street, in its financial machinery, facilitates the natural flow of money, provides the means for the promotion of enterprises, safeguards and assists the movement of commerce, and maintains that system

of credits by which a ten-fold power of service is given to every dollar.

Diffusion of Wealth.—By the machinery of its stock-market it promotes the diffusion of wealth; it makes possible for great capital to be accumulated for vast undertakings, governmental and private, too big for individual effort; it enables a multitude of small capitalists to become partners in these big enterprises, by its agencies for the distribution of securities from the hands of producers into the hands of investors as the ultimate consumers;* and it is able by its speculative machinery to anticipate human needs, and to secure a more even and equitable level of prices. For this work it must be paid, call it a fee if it be regarded as professional service, call it a toll if it is thought to liken Wall Street to a gate, or a tax if one prefers to speak of Wall Street as exercising legislative power, or a price if it is thought more proper to regard Wall Street as a merchant selling credit and securities for the most they will bring. But whether a fee, a toll, a tax, or a price, it can not be disputed that Wall Street earns a reward for an indispensable service.

There is a feeling that Wall Street has charged too much for its labor and that this excess charge constitutes an intolerable burden upon the business of the country.†

If this were true, in any large way, Wall Street could not exist. Wall Street has no monopoly of facilities. If

* The fundamental function of the Exchanges is to give mobility to capital."

CHARLES A. CONANT.

† The Commissioner of Corporations, in his report (1911) on The United States Steel Corporation, charged that excessive profits were made by the underwriters who organized the company, in as much as, on a cash expenditure of \$28,000,000, it made a net profit of \$62,500,000, of which one-half went to the managers and the rest to the syndicate members. The liability of the underwriters is declared to have been "nominally" \$200,000,000, but not really more than the sum actually advanced. On the other hand the report attempts no real appraisement of the value of the expert service and influence given.

it charges too much for its services, it has competitors to whom one may go. If it is inefficient or false to its trust, it must surely fall. Individual instances of graft, and other forms of corruption and of manipulation and extortion, it would be easy to prove, for they can be found in plenty; but taken as a whole Wall Street performs its work with integrity and skill, and at a price regulated by the law of supply and demand. The profit of a banking house, in the flotation of a bond issue, may seem at times enormous, but that depends upon the point of view, and all the conditions involved in the transaction. The farmer who has to sell his apples at \$1.50 a barrel, and then sees them retailed from a fruit stand in Wall Street at five cents a piece, may think that he has been robbed, whereas he may have obtained exactly the fair price. His apples will rot in his orchard if he can not find buyers for them. The buyers must either come to the apples or the apples must be carried to the buyers. The farmer has not the facilities to bring his product to the consumer; others must perform that service for him and they must be paid. Therefore a dollar and a half a barrel at the farm, and five cents apiece on the streets of New York may both be equitable and honorable prices.

Nowhere else in the world is actual money handled with such a minimum of loss, through dishonesty and carelessness, as in Wall Street; and in its credit and security transactions it compares well for good faith and efficiency with any other department of human endeavor.

Seat of Stock- and Money-Markets.—Wall Street is the seat of (1) The Stock-Market; (2) The Money-Market. Each is distinct from the other, but both are interdependent. The Stock Exchange is the head of one and the Bank Clearing-House of the other.

The Stock-Market is a place where securities may be bought or sold (a) for investment; (b) for speculation.

By its facilities for investment and speculation the Stock-Market brings together those who have capital to invest, and those who need capital for new enterprises or additional capital for old enterprises. It thus aids in the distribution of wealth and the development of the country. It brings into the service of business enterprise the savings of the thrifty, and enables hundreds of thousands of persons to put their savings into mighty enterprises.

The money market is in four main divisions all closely allied to each other, and having many subdivisions:

(a.) Foreign exchange, by which the operations of international enterprise and international commerce are financed;

(b.) Domestic credits by which, through checks and commercial paper, food and merchandise are marketed and the manifold needs of inland trade cared for;

(c.) Promotion, by which corporate and other large enterprises are created, underwritten and financed;

(d.) Stock Exchange loans, both on call and time, by which investment and speculative transactions in securities are made possible.

REFERENCES

Suggested Reading

"The Scope and Function of the Stock Market," S. S. Huebner in *Annals of American Academy of Political and Social Science*, May, 1910.

"Wall Street and the Country," Charles A. Conant, 1904.

CHAPTER IV

SCOPE OF WALL STREET

With the rapid conversion of all forms of business into stock corporations, there has been a remarkable expansion in the scope of the world's stock-markets during the past third of a century. In the United States the great bulk of the wealth of the country is now represented by stock and bond certificates. In 1904, the national wealth was officially computed at \$107,000,000,000. In 1911 it was estimated at \$125,000,000,000. In 1905 it was computed by a competent statistician * that the total outstanding stocks and bonds issued by American corporations amounted to over \$34,500,000,000, which was 32 per cent. of the total wealth of this country in the preceding year, and 31 per cent. of the world's total of negotiable securities. But this amount, imposing as it is, represented only the more important corporations issuing stocks and bonds, and did not touch a vast aggregate of securities issued by small industrial and mercantile concerns. A much better and later measure of the scope of the American stock markets is afforded by the returns made to the United States Commissioner of Internal Revenue by the corporations paying the special excise tax under the corporation tax law enacted in 1909.

Amount of Securities.—From these returns it appears that on June 30, 1910, there were 262,490 corporations in the United States having capital stock amounting to \$52,371,626,752 and bonded and "other indebtedness" amounting to \$31,332,952,696, a total of \$83,705,579,448. Making allowance for the "other indebtedness," not rep-

* Charles A. Conant.

resented by certificates, it is probable that the total of stocks and bonds issued by American corporations is in the neighborhood of \$75,000,000,000,* which is about 60 per cent. of the nation's wealth, and is moreover the most important part of that wealth, because it controls, not only many of the sources of production, but practically all of the agencies of transportation and credit. Of these 262,490 corporations, 89,384 are manufacturing and mining, 54,673 mercantile, 29,812 financial, 24,252 public service and 64,359 miscellaneous.

Their Distribution.—It is impossible by statistics to determine the number of persons owning this immense total of securities. But the number of individual holders is very large, and the number of persons having an indirect ownership through their interest in co-operative associations, such as mutual savings banks and insurance companies, is still greater. A leading authority † estimated that the capital stock of 234 leading railroad and industrial corporations amounting to \$10,711,575,719 was in 1911 held by 980,399 persons. If the same proportion held for the entire \$52,000,000,000 of capital stock in the United States, there are over 4,000,000 of shareholders in the country, not counting the owners of bonds. As there are many persons who hold stocks in several companies, and as there are a multitude of companies in which there are only a handful of shareholders, this total is undoubtedly an overestimate. Nevertheless the number of individual owners of securities forms a large and important element in the community. Moreover the savings banks in the

* To this total should be added the United States and the State, County and municipal bonds amounting to over \$3,000,000,000, to obtain the aggregate of the negotiable securities in the United States. In 1900 the total of the world's negotiable securities was estimated at \$111,077,764,333.

† The *New York Journal of Commerce and Commercial Bulletin*, December 20, 1911.

country hold \$1,797,111,826 of stocks and bonds which are thus owned by over 9,000,000 of depositors. The ordinary and industrial life insurance companies are also big holders of securities which are thus indirectly owned by the holders of about 28,000,000 policies. Undoubtedly there is a very considerable degree of concentration of the control of the administration of wealth through directorships, but never before in our national history has there been so wide a distribution of wealth, and this wide distribution has been made possible by the stock company form of carrying on the productive and distributive business of the country. Directly or indirectly nearly every family in the United States has an interest in the stock-markets, and the prosperity or depression of the corporations affects the incomes of a vast and increasing proportion of the people of the country.

Bank Credits Based on Securities.—Moreover stock and bond securities form the basis of a large part of the bank credits of the United States. In 1910, the loans and discounts of the national and state banking institutions amounted to \$12,500,000,000, of which one-third was secured by stocks and bonds.

The \$75,000,000,000 stocks and bonds in the United States are not all represented in the New York stock-market. Every city of considerable size has its own little stock-market in which local securities are dealt in, while twelve large cities* outside of New York have stock-markets organized and regulated by stock exchanges.

But the New York stock-market is the largest in the country, and is the main market for the stocks and bonds

* Boston, Philadelphia, Baltimore, Chicago, St. Louis, Pittsburg, Denver, Kansas City, San Francisco, Los Angeles, Seattle, New Orleans.

of all the important corporations of the country, upwards of one-third of all the securities issued in the United States being listed on the New York Stock Exchange.

Listed Securities.—In 1902 when the first edition of this book was written there were \$13,791,866,317 of listed and \$1,227,219,645 of unlisted securities, making a total of \$15,019,085,962 stocks and bonds admitted to dealings in the Exchange. On October 15, 1906, the total was \$20,267,223,166. Since the Hughes Commission inquiry the unlisted department has been abolished, but so great has been the growth in the output of securities, that on October 18, 1911, there were \$24,374,081,323 of stocks and bonds listed for trading in the Exchange. This is an average increase of about one thousand million dollars a year. The expansion between 1902 and 1906 was, however, greater than between 1906 and 1911. In 1868 it was estimated that \$3,000,000,000 of securities were admitted to trading in the then existing two stock boards, and the increase from that total to over \$24,000,000,000 in 1911, shows how enormous has been the growth in the number and size of corporations in 43 years.

The following table shows the amount of each class of securities listed on the New York Stock Exchange October 18, 1911:

STOCKS.	1911.
Bank stocks	\$ 115,570,000.
Trust Company stocks	6,500,000.
Railroad stocks	5,968,836,650.
Manufacturing and Industrial stocks	3,341,039,750.
Street Railway stocks	468,980,600.
Express Company stocks	63,967,300.
Mining stocks	467,062,650.
Coal and iron stocks	143,520,300.
Gas and electric light stocks	256,198,000.
Telegraph and telephone stocks	548,916,200.
Miscellaneous stocks	294,023,900.
Total stocks	<hr/> \$11,683,795,350.

BONDS.

Railroad bonds	\$ 7,539,408,100.
Street Railway bonds	511,283,000.
United States bonds	897,890,530.
Foreign government bonds	1,879,359,000.
State government bonds	121,711,693.
Gas and electric light bonds	241,138,000.
Manufacturing and industrial bonds	679,480,350.
Coal and iron bonds	103,545,300.
Telegraph and telephone bonds	246,497,500.
City and county bonds	20,055,000.
New York City securities	449,917,500.

Total bonds\$12,690,285,973.

Aggregate stocks and bonds\$24,374,081,323.

EXPANSION IN FORTY-THREE YEARS.

	Total securities Listed.
1868 (estimated)	\$ 3,000,000,000.
1902	15,019,085,962.
1911	24,374,081,323.

Railroad Securities.—An inspection of this table shows how largely railroad securities predominate in the market. They aggregate over 55% of the total listings, and they have increased since 1902 from 9,129 millions to 13,507 millions; and this great expansion has taken place notwithstanding the period has been one of rapid extension of governmental control over railroad rates and railroad securities, even to the matter of valuation and capitalization. Manufacturing and industrial stocks and bonds have in the same time increased from 2,808 million dollars to 4,020 million dollars.

Foreign Securities Listed.—A notable development of the past ten years has been in the widening as well as in the increased volume of the market. In the first edition it was noted that “practically every dollar” of the securities admitted to dealings in the Stock Exchange “represents American investments.” In 1911, on the other hand, foreign government bonds to an amount of \$1,879,359,000 were on the list as compared with \$119,529,600 in 1902. Government securities of Argentina,

Bolivia, China, Cuba, Dominican Republic, Germany, Japan, Mexico and Russia are now traded in on the New York Stock Exchange. Among other foreign securities (not governmental) that are also listed are railroads of Canada and Mexico, street railways of London and Havana, and irrigation of South America. Every section of the United States, as well as the Philippines, is represented in the list. In all there are 1,461 different securities on the list against 1,286 in 1902; of bonds there are 1,023 including 720 railroad issues.

Comparison With London.—Wide as the scope of the New York Stock Exchange is—and as has been seen it is widening so as to cover the American Continent more completely and to include even foreign countries—it is still more national than international and is much less comprehensive than the London Stock-Market, though in volume of speculative transactions it is undoubtedly greater.

In London the securities of every country and nearly every large city on the globe are dealt in, to the number of over 4,000. The principal securities of the United States are traded in there, and the Americans often form an important factor in the market. Such widely separated countries as Argentina and Persia, China and Canada, Roumania and Chili, India and Mexico, Russia and Venezuela, Italy and Cuba, Morocco and Servia are represented on the list. London, New York, Moscow, Montreal, Pekin, Buenos Ayres, Calcutta, Milwaukee, Hong Kong, Rio de Janeiro, Manila and Cape Town are among the cities whose governments or corporations contribute to the greatness of the London market. Any one who undertakes to obtain a grasp upon such a market must take a world view of things; and indeed the fully equipped modern banker is at once business man, political economist, diplomat and statesman. On a re-

cent day described as "dull," quotations were established in London for 14 English government bonds, 17 Egyptian securities, 17 Colonial government bonds, 66 other foreign government bonds, 20 foreign city stocks, 43 American and 38 English railroad stocks, or to use the London term "rails"; 11 Mexican and 16 Colonial "rails," 9 underground "rails," 16 motor stocks, 4 land company stocks, 24 food company stocks, 16 hotel stocks, 9 tobacco stocks, 217 rubber stocks, 90 oil stocks, 89 tea stocks, 50 brewery stocks, 43 bank stocks, 23 drapery and warehouse stocks, 19 telegraph and telephone stocks, 17 newspaper stocks, 19 nitrate stocks, 13 theater stocks, 12 gas stocks, besides many others; all of which goes to show how far reaching the stock company method of conducting business has been carried, and how naturally these stocks gravitate to a great central market representing immense investment capital. In 1909 the total par value of all securities quoted in the London Stock Exchange amounted to about \$51,000,000,000.

England and France are notable for their stores of capital invested abroad, because the opportunities for investment at home are comparatively limited. Both have many billions of dollars invested in the securities of other nations. England's aggregate of exported capital is estimated at \$17,500,000,000, of which one-half is invested in British Colonies and one-half in foreign countries. Sir Edgar Speyer has estimated that in 1911 Great Britain received \$900,000,000 in interest on her foreign investments. The foreign investments of the United States are infinitesimal as compared with those of England, France or even of Germany and Holland, but they are increasing. This interchange of capital between nations promotes international trade and good will. By the magnitude of its market New York has become one of the four capitals of the world.

With London, Paris, and Berlin it stands as one of the four great international money-markets and its influence is felt everywhere that the credit system extends.

Foreign Commerce.—The volume of the foreign exchange transactions of New York it is impossible to estimate. There are no statistics on the subject; and the Bureau of Statistics at Washington, it seems, has found it impracticable to obtain them, valuable as they would be. The great bulk of the foreign commerce of the United States which in 1910 amounted to \$3,564,339,325, of which \$1,727,006,057 or 48.4 per cent. of the whole passed through New York, was financed in Wall Street. But in addition to this the foreign exchange markets of Wall Street conducts an immense business in the transfer of credits back and forth between the United States and foreign countries in payment of travelers' checks, security-investments, money borrowed and other items of "invisible" exchange.

Domestic Commerce.—The domestic commerce of the country aggregates probably over twenty-five billions of dollars a year, and of this amount it is fair to estimate that over one-half is financed in New York. The total bank clearings of the United States in 1911 were \$158,767,986,959, of which \$92,372,812,735 were in the New York Clearing-House. For twenty-five years New York's proportion of the total bank clearings of the United States has been about 60 per cent. This gives as fair an indication of the scope of the Wall Street money-market as it is possible to arrive at.

The banking power of the United States in 1910 was \$21,049,244,383, of which \$4,770,180,483 was in the City of New York. This made 22.86 per cent. of the whole, but New York's total as thus given does not include the big private banks, two or three of which have resources greater than that of any public institution. In

1908 it was computed that New York's banking power amounted to nearly 10 per cent. of the banking power of the world.*

REFERENCES

- "The World's Wealth in Negotiable Securities," Charles A. Conant, *Atlantic Monthly*, January, 1908.
 "Stocks and the Stock Market," *Annals of American Academy*, May, 1910.

* The following is a record of bank clearings from 1897 to 1911:

	New York.	Outside New York.	Total.
1911	....\$ 92,372,812,735	\$66,395,174,224	\$158,767,986,959
1910	.... 97,274,500,692	65,629,630,337	162,904,130,429
1909	.... 103,588,738,320	61,564,713,413	165,153,451,763
1908	.... 79,275,880,256	52,819,835,592	132,095,715,848
1907	.... 87,182,168,381	57,589,507,214	140,771,675,595
1906	.... 104,675,828,656	55,259,903,059	159,935,731,715
1905	.... 93,822,060,202	50,169,568,273	143,991,628,475
1904	.... 68,649,418,673	43,962,703,717	112,612,122,390
1903	.... 65,970,337,955	43,238,849,809	109,209,187,764
1902	.... 76,328,189,165	41,695,109,575	118,023,298,740
1901	.... 79,427,685,842	38,982,329,340	118,410,015,182
1900	.... 52,634,201,865	33,436,347,818	86,070,549,683
1899	.... 60,761,791,901	33,285,608,882	94,047,400,783
1898	.... 41,971,782,437	26,854,774,887	68,826,557,324
1897	.... 33,427,027,471	23,802,043,485	57,229,070,956

CHAPTER V

THE STOCK-MARKET

Two questions confront us at the threshold of this subject:

1. What is a stock-market?
2. Why is there a stock-market?

An answer to one is practically an answer to the other.

A stock-market is an income market. It is a place where incomes are bought and sold. No one, it is true, goes to the Stock Exchange as he might to an insurance company, and, paying over the requisite amount of money, buys an annuity. Yet, essentially, the stock-market operation is the same. The stocks and bonds traded in on the Stock Exchange would be worthless unless they represented value either present or prospective. Bonds and preferred stock generally represent fixed income. Common stocks represent speculative income—that is, income that may vary from year to year, according to the earning capacity of the corporations issuing them. If a company has no income and no prospect of earning one, its securities are worth no more than so much waste paper. It is true that the stocks of an insolvent company are often quoted in the market, but their value consists in the control of the charter, the franchise, or some other privilege from which it is believed an income may some time be derived. Several years ago a list of 48 non-dividend-paying stocks was published whose average market price was 41, but every one enjoyed the prospect, immediate or remote, of future dividends. There would be no stock-market if there were no incomes.

In Paris an investor will say to his broker, "Buy me enough rentes to pay me an income of, say, 50,000 francs a year." He goes into the market to buy not rentes, but income. In New York the investor does not express himself so directly. He says to his broker, "Buy me \$500,000 of bonds." Now, what he is actually buying is not bonds, but the income the bonds will yield. Before placing the order he has calculated exactly what will be the income, taking into account the premium paid, the interest promised, and the duration of the bond. All investments are thus made on the income basis.

Beginnings of the Market.—The stock-market, therefore, rests upon a sound economic basis. In telling what it is we have indicated clearly why it is. Writing of the beginnings of the English stock-market more than two centuries ago, Macaulay says:

During the interval between the Restoration and the Revolution the riches of the nation had been rapidly increasing. Thousands of busy men found every Christmas that after the expenses of the year's housekeeping had been defrayed out of the year's income a surplus remained; and how that surplus was to be employed was a question of some difficulty. In our time, to invest such a surplus at something more than 3 per cent. on the best security that has ever been known in the world is the work of a few minutes. But in the seventeenth century a lawyer, a physician, or retired merchant, who had saved some thousands and who wished to place them safely and profitably, was often greatly embarrassed. Three generations earlier, a man who had accumulated wealth in a profession generally purchased real property or lent his savings on mortgage. But the number of acres in the Kingdom had remained the same, and the value of those acres, though it had greatly increased, had by no means increased as fast as the quantity of capital seeking for employment. Many, too, wished to put their money where they could find it at an hour's notice, and looked about for some species of property which could be more readily transferred than a house or a field. There were a few joint-stock companies, among which the East India Company held the foremost place; but the de-

mand for the stock of such companies was far greater than the supply. Indeed, the cry for a new East India Company was chiefly raised by persons who found difficulty in placing their savings at interest on good security. So great was that difficulty that the practise of hoarding was common.

Where there is a demand a supply is usually found. Out of this condition of things grew the English stock-market, and by 1688 stock-jobbing was in full swing in London. Macaulay goes on to describe the output of new companies at this period. A crowd of projectors, ingenious and absurd, honest and knavish, employed themselves in devising new schemes for the employment of redundant capital. Some of the companies took large mansions and printed their advertisements in gilded letters. Jonathan's and Garroway's were in a constant ferment with brokers, buyers, sellers, and meetings of directors. Extensive combinations were formed, and monstrous fables were circulated for the purpose of raising or depressing the prices of shares.

An impatience to be rich [he added], a contempt for those slow but sure gains which are the proper reward of industry, patience, and thrift, spread through society. It was much easier and much more lucrative to put forth a lying prospectus announcing a new stock, to persuade ignorant people that the dividends could not fall short of 20 per cent., and to part with £5,000 of this imaginary wealth for 10,000 solid guineas than to load a ship with a well-chosen cargo for Virginia or the Levant.

Macaulay's account of the first English stock-market and the evils to which it gave rise, serves as a description of the stock-market of to-day. It shows at once the legitimate reason for such a market and the evils to which it is exposed. We hear so much of the evils that we are apt to overlook the fact that the stock-market represents the thrift and enterprise of the people even more than it does their gambling propensities.

Value of Organized Stock-Market.—Wall Street is commonly pictured in the newspapers as an American Monte Carlo. But it has been well said that there is no great modern nation without a Stock Exchange. The first Napoleon, who had a keen appreciation of everything that contributed to the glory of France, did not deem it beneath his dignity to lay the corner-stone of the Paris Bourse. John R. Dos Passos has said that "it is absolutely certain that without the existence of great public marts, like the New York and London Stock Exchanges, the marvelous development and progress of this country, which make it the wonder and admiration of the world, would not have been attained." He quotes Judge Bramwell, in a leading English case, as deciding that it is no disadvantage that there should be a market where speculation may go on, for it is owing to a market of this kind that there are so many railroads and other useful undertakings.

Investment of Savings.—The Stock Exchange provides a place for the investment of savings. A distinct immorality attaches to hoarding, but investment carries a double blessing: it benefits the investor and those who have the use of the money. There is a limit to real estate investments. Not everybody can put their surplus money into land. There must be other objects of investment. So capitalists, large and small, enter the stock-market. The mechanic who puts his few dollars into the savings bank enters the stock-market by proxy; the bank invests his money for him, some of it in real estate, some in securities. The professional man who buys an insurance policy enters the stock-market by proxy; the insurance company invests its assets very largely in securities. When it is said* that there are

* See chapter on "Scope of Wall Street."

in the United States 9,000,000 savings bank depositors and more than 28,000,000 life-insurance policies, it is seen how large a proportion of the population is at all times thus indirectly concerned in the stock-market. Business men and others enter Wall Street directly, for the purpose of investment of the profits of their own business. The stock-market, therefore, performs the most beneficent function of providing a place where investments can be made and incomes secured.

Marketability.—As practically all large business affairs are now carried on by companies, it follows that stocks and bonds constitute about the only form of investment outside of real estate. And they are the best form of investments; first, because they are so easily converted into cash, and, second, because they are so easily hypothecated for loans. There is always a market for securities in Wall Street. There has never been a time in recent years when a stock or bond of which Wall Street possessed any knowledge could not be sold there, provided the price was satisfactory. A man can convert a fortune into money in a day, or, like Andrew Carnegie, capitalize his entire business in a single operation. To obtain a loan on real estate one is put to considerable expense and labor. There must be a search of the title, and the mortgage to secure the loan must be duly recorded. But to obtain a loan on marketable securities, all one has to do is to carry them in an envelope to a lender of money, and the line of credit may be obtained in a few minutes.

The stock-market exists, therefore, because the business of the age has need of it, because it is essential to civilization. But, like everything else human, this useful agency of thrift and enterprise is liable to abuse. Macaulay has shown how more than two centuries ago men who had saved money sought to invest it, an act of

the highest wisdom, and how the demand for investment grew, first into a craze for speculation, and finally into gambling and fraud.

In Wall Street, upon the substantial foundation of investment, has been built a vast superstructure of speculation. Speculation is an investment of money in which large risk is taken in expectation of great gain. But it is not easy to draw the line where investment ends and speculation begins. In Wall Street such a line is drawn, but it is an arbitrary division. When a security is bought and paid for in full, put away in a place of safe keeping and held for the income it yields—that is called an investment. The great bulk of the dealings in bonds are for investment. When a security is bought on margin and held for sale as soon as the price advances—that is speculation. The bulk of the dealings in stocks are speculative.

Credit in Speculation.—But speculation may be as truly an investment as investment itself. Most investors who pay outright for their securities are ready to sell them again at a profit. They buy them for the incomes, but if the advance in price is large enough, the profit in selling may be more attractive than the profit in keeping. On the other hand, the speculator buys on a margin to sell again on a rising price, but he buys and sells on an income basis the same as the investor. All wholesale business in modern trade is done on credit, which is only another form of the Wall Street system of margins. The merchant who restricts his purchases to the amount his cash capital can pay for in full, must do a comparatively small business. The wholesaler's capital, in a certain sense, corresponds to the speculator's margin. The former buys on time and borrows of the bank the money to pay for the goods as the time for payment approaches. With a capital of \$100,000 he may buy, say,

\$500,000 worth of goods. It is only by a system of credits that the great operations of modern business can be conducted. The speculator buys stocks, like the merchant, on credit. With a capital of \$10,000 the investor can buy 100 shares of stock, selling at par value of \$100 per share, and pay for them in full. But with \$10,000 deposited as a margin the speculator can buy ten times as much stock, with the chance of realizing ten times the profit. Of course the risk is much greater. If the price declines the speculator may lose his entire margin or capital; but the merchant also runs a risk in buying goods in excess of the amount of his capital. Except that there is a greater mobility in the stock-market than in other markets, so that changes in prices are more rapid and extreme, the risk in both cases is equal.

The operations of the merchant and the speculator are therefore, in the last analysis, essentially the same, except that the speculator's risks are larger. If all business, whether in stocks or in trade, were conducted strictly on the cash or investment basis, the transactions would be very limited. Credit means expansion and activity. In times of panic, when credit is withdrawn, speculation ceases, and all business becomes of the investment order. Then stagnation sets in, wages fall, and wide-spread suffering is caused. Some one has said that speculation is "a disease of the mind"; but Henry Clews, in his testimony before the Legislative Committee which investigated corners in 1881, gave a far better definition. He said that "speculation is a method for adjusting differences of opinion as to future values, whether of products or of stocks. It regulates production by instantly advancing prices when there is a scarcity, thereby stimulating production, and by depressing prices when there is an overproduction."

Gambling a Disease.—There is a point, however, where speculation becomes a disease of the mind: it is the point where it changes into mere gambling. If it is difficult to draw the line between investment and speculation, it is still more difficult to draw that between speculation and gambling. Yet there is a difference between the two, although many critics of Wall Street fail to see it. The speculator may be defined as a man who, making a study of business conditions and of the earning power of the companies in whose stocks he purposes to trade, buys because he believes that prices ought to advance, or sells because he believes they will fall; and does so on a margin ample to protect him against any ordinary vicissitudes of the market. He exercises the same foresight and conservatism as does the merchant who places a large order for goods. The gambler in stocks is one who goes it "blind," buys and sells without due study of conditions or of the property in which he invests, but trusts to chance. He often risks more than he can afford to lose, perhaps wasting the savings of many months in one transaction. He might as well risk his money on a horse-race or a roulette table. Wall Street is full of gamblers of this kind. "People deal in chance," said Jay Gould to a Senate committee. "Your minister, doctor, and barber have all the same interest in speculation."

Glamor of Speculation.—Into the Street crowd hundreds of men and women, drawn by the stories told of the enormous fortunes made there, the great sums cleared in one deal, the big profits of a single transaction. The glamor of speculation fascinates them. In the year 1902 the story of John W. Gates's sensational deal in Louisville and Nashville stock, in which he bought control of a great railroad in a few days, served so to excite the gambling propensities of the country that Wall Street

was soon filled with a crowd of outside speculators. Without training or study or intelligent consideration, these outsiders, or "lambs," as they are often called, stake their money on the mere chance of the rise and fall of prices. In other words, they bet on quotations. No wonder they are generally all sheared in the Street. "Gamesters die poor," says Andrew Carnegie in his "Empire of Business," "and there is certainly not an instance of a speculator who has lived a life creditable to himself or advantageous to the community. The man who grasps the morning paper to see first how his speculative ventures upon the Exchanges are likely to result, unfits himself for the calm consideration and proper solution of business problems." If Mr. Carnegie had used the word "gambler" in place of the word "speculator," his statement would have been absolutely correct.

The gambling in stocks, however, is not limited to the class of outside amateurs. The Street has its professional gamblers as well—men who know every trick of the desperate business in which they are engaged; "plungers" who take enormous risks for the chance of enormous gain. A very considerable proportion of the business of the Stock Exchange, and practically all the business of the bucket-shops, is pure gambling.

Volume of Transactions.—The statistics of the "boom" year of 1901 may be studied to advantage by those who desire to obtain an idea of the scope of speculation and of some of the laws which govern it. In that year the total sales of listed and unlisted stocks traded in at the Stock Exchange represented a par value of \$25,272,329,200, which was three times the total par value of all the stocks admitted to dealings by the Exchange—a fact revealing the speculative character of the transactions. In a single year the entire supply of stocks was sold three times over. These stocks included many that are rarely traded in at all. In the active stocks

the speculation was much heavier, and there were some whose entire capital changed hands ten to twenty times over in the course of a year. The following are 9 stocks the total number of whose listed shares were, in 1901, sold nearly fifteen times over:

	Total sales shares.	Number shares listed.	Times sold.
St. Paul	12,700,000	558,218	22 $\frac{3}{4}$
Union Pacific	22,246,000	1,040,514	21 $\frac{1}{4}$
American Sugar	8,121,000	450,000	18
Rock Island	8,195,000	599,619	13 $\frac{1}{2}$
Manhattan	6,086,000	480,000	12 $\frac{3}{4}$
Wabash (preferred) ...	3,009,000	240,000	12 $\frac{1}{2}$
Atchison	12,177,000	1,020,000	11 $\frac{3}{4}$
Brooklyn Rapid Transit.	5,362,000	450,000	11 $\frac{7}{8}$
Erie	11,185,000	1,123,470	10
Total	89,081,000	5,961,821	14 $\frac{5}{8}$

This means not only speculation, but overspeculation. Such a market could hardly be termed healthy, and it is not surprising that at the height of the speculation the severe convulsion of May 9 occurred. Nine days earlier, on April 30, the total sales of the day were 3,270,884 shares, of which 2,150,517 were of nine stocks, as follows:

	Total sales.	Number of shares listed.
United States Steel	489,444	5,084,780
Erie	309,800	1,123,470
Atchison	247,450	1,020,000
United States Steel (preferred).....	220,140	5,102,773
Union Pacific	206,353	1,040,514
Southern Pacific	151,800	1,978,321
Atchison (preferred)	141,530	1,141,995
Northern Pacific	94,300	1,550,000
New York Central	89,700	1,150,000

Overspeculation.—Thus, in one day, about one-eighth of the entire capital stock of 9 great companies were sold in the Stock Exchange. On April 24, 1901, 662,000 shares of Union Pacific—two-thirds of its entire issue—

were sold. On April 15, 1902, 877,000 of the total 1,200,000 shares issued of Southern Railway were traded in. On one day in February, 1893, there were 957,955 shares (\$50) of Reading sold. A great "turn over" of sales is of course necessary in the process of distributing securities among investors after they leave the hands of the manufacturer. A bushel of wheat or a quarter of beef or a yard of cloth is sold several times before it reaches the consumer. So the large sales on the Exchanges are, in the main, in accordance with a natural economic law.

It is true in a sense as Bacon said many years ago, "As for the chopping of bargains, when a man buys not to hold but to sell over again, that commonly grindeth double, both upon the seller and upon the buyer." But this is one of the necessary evils of the whole system of transportation, and it is compensated for by the benefits conferred. The same thing is true of the process of transporting goods from one place to another. It involves a tax which "grindeth double" both upon the shipper and the consumer, but the transportation benefits both. Speculation is in one of its aspects the transportation of securities from producer to consumer. But when it is said that in 1910 about 225,000,000 shares of stock valued at \$20,000,000,000 * were sold on the five principal Stock Exchanges of the United States, the question may fairly be asked whether a considerable proportion of this total did not represent overspeculation which is waste, the evil of which must be charged off the value of speculation properly conducted.

It is only within a recent period that the volume of stock transactions has been studied with a view of ascertaining what, if anything, they reveal of the real conditions underlying the stock-market. Most people imagine that the daily total of sales shows only the

* Estimate of Professor Jacob H. Hollander.

degree of the market's activity. Sometimes the sales do not even do that, for it sometimes happens that professional manipulation swells the total of sales when the market actually is dull. Some years ago commission houses were complaining of a lack of business when the daily sales averaged 600,000 shares. As a matter of fact, however, the record of sales intelligently studied proves one of the most important indices to the actual conditions of the market. One of the oldest and largest banking-houses in Wall Street keeps a careful record of total sales as one of its guides to its judgment of the course of the market. Taking the sales of 20 active railroad stocks as the basis of its calculations, it has for twelve years divided the record of these sales into two columns, one giving the total transactions when prices were advancing, and the other the sales when prices were declining. The following table, prepared by this house, shows the millions of shares of 20 active railroad stocks dealt in in the bull and bear periods of each year:

SALES

	MILLIONS OF SHARES.		EXCESS.	
	Bull periods.	Bear periods.	Bull.	Bear.
1890	24	15	9	..
1891	26	24	2	..
1892	38	48	..	10
1893	17	51	..	34
1894	16	23	..	7
1895	32	30	2	..
1896	21	30	..	9
1897	47	22	25	..
1898	49	47	2	..
1899	116	88	28	..
1900	114	43	71	..
1901	170	72	98	..

An examination of this table shows that in the ten years from 1890 to 1899, inclusive, the number of shares dealt in in the bull periods was only 8,000,000 more than the number sold in the bear periods. In other words, every share bought in those ten years was sold again, excepting 8,000,000, the total transactions of the 20 stocks having been 764,000,000 shares. It is a fair inference that the 8,000,000 went into the hands of permanent investors. The remaining 756,000,000 shares represented the speculative business. In the panic year of 1893 the sales in the declining market were 34,000,000 shares in excess of the sales in the bull periods. In the boom years of 1900 and 1901 the excess of shares traded in in the bull periods over those sold in the bear periods was 169,000,000. In the preceding ten years, as has been seen, the bull and bear periods nearly balanced each other, but here, in two years, a tremendous excess appears on the bull side. The inference drawn from this was, that an immense number of shares had been bought for sale, but were still held awaiting a favorable opportunity for realization of profits or possibly a time of forced liquidation. This inference later developments proved to be correct.

During the year 1901 the sales of stocks averaged upwards of 900,000 shares a day except on Saturdays, when the Exchange is open only for two hours. There were several Saturdays, however, in which the two hours' business aggregated more than 1,000,000 shares.

Taking for illustration 900,000 shares a day as a basis of calculation, it is roughly estimated that 300,000 shares represent manipulation, 300,000 the transactions of the room traders, and 300,000 the actual buying and selling by pools and public. This estimate, of course, is merely an estimate of average conditions, and it has been criticised on the ground that it exaggerates the volume of

manipulative transactions, and under-estimates those of bonafide business. There are days when manipulation represents nearly all of the dealings. There are other days when the room traders constitute nearly the entire market. There are days in which the public is predominant.

Number of Operators.—Taking one month with another, and one year with another, there is probably an average of 60,000 persons in the stock-market all the time. In periods of activity there are doubtless many more, in periods of dullness and uncertainty many less, but the market can, as a rule, depend upon this support for its speculative business. It does not follow that the same 60,000 persons are in the market all the time. Wall Street is like a hotel. New guests are constantly arriving and others leaving. Sometimes every room is occupied and cots have to be placed in the halls, so great is the crush. At other times half the house is empty. This estimate applies only to the New York Stock Exchange and its customers. To the 60,000 individuals who constitute its market, must be added the many patrons of the Consolidated Stock Exchange. To the number should also be added the small speculators who frequent the offices of the irregular and bogus brokers, and who may be likened to the camp-followers of a great army. The New York Stock Exchange, however, makes the market for stocks. Its prices govern the outside speculation as absolutely as they do that within its own walls; and while the outside speculation is of a very considerable, though unknown, volume, in speaking of the "stock-market" the reference is always to the business of the Stock Exchange.

"Bulls" and "Bears."—The market is divided into two main divisions: one, the bulls, representing those who buy stocks in the expectation that they can sell at

higher prices; and the other, bears, or those who sell stocks in the expectation that they can buy them later at lower prices. A bull who has bought is "long" of the market; a bear who has sold is "short" of the market. A "long" who sells at higher prices is said to have realized his profits, or if he sells at a loss is said to have liquidated. In case the sale is the result of an exhausted margin or the calling of loans, it is forced liquidation. A "short" who buys stocks is said to have "covered," and this term applies whether he has bought at a profit or a loss. When too many persons have bought stocks the "long" interest becomes too heavy for the market to carry, and it is generally comparatively easy for the bears, by selling short, to depress prices and force the "longs" to sell, when the "shorts" can cover at a profit. This operation is generally called "a bear raid." On the other hand, when the "short" interest becomes too large it is generally easy for the bulls to advance prices, thus forcing the "shorts" to cover. A "short" interest is often an element of strength to the market because it creates a demand for stocks to cover.

Professionals and Public.—There are two other divisions in the market, the professionals and the public. The professionals are those who make a business of speculation. The public is a class of individuals who, engaged in trade or commerce, appear in the Street as occasional speculators.

In a newspaper of August 3, 1835, appeared this interesting item:

New Orleans, Kentucky, Tennessee, and Ohio stocks sell at high prices. Merchants bring parcels of these stocks across the mountains. They are better than bills of exchange. A great many merchants in the streets around Wall Street now dip privately in stock speculation. Many of the officers of the banks and insurance companies do the same thing. This is the cause of the

great increase of stock speculation. Pearl Street is nearly impassable by reason of the quantity of boxes on the sidewalks. So in Wall Street by the groups of brokers.

This is an early picture of the public in the stock-market. To-day, as nearly seventy years ago, merchants dip not only privately, but openly in speculation; while not only New Orleans, Ohio, and Tennessee are represented in the market, but Chicago—a city then unknown—and the great far West, reaching even to the Pacific. For the stock-market is thoroughly national in its scope.

A stock-market that has no "public" is in a most unsatisfactory condition. Professionals can and do buy and sell among themselves, but this is a process not unlike the "swapping" of horses between regular horse traders. The public supplies the new interest in the Street, the fresh demand, the increased capital.

The professional is a class that includes many different kinds and degrees of operators. The banking-house carrying 150,000 and more shares and the curbstone speculator who buys 10 and 20 shares may both be, in the true sense, professionals. They are both, one in a wholesale and the other in a retail way, engaged in the business of discounting the future. Both make a study of values and make a profit, large or small, by their intelligence in correctly reading the signs of the times. They are the skilled workmen of the Street, and they constitute a highly trained body of experts in stock values and market prices. In their way they display as much ability as the scientist, the artist, and the artisan. In this class of professionals are many skilled in manipulation. In this class also must be placed the room traders, or those members of the Exchange who do business only for their own account and who become skilled in knowing how to take quick advantage of the ever-moving prices in the board-room. To the professional,

speculation is like a game of chess; and a man like James R. Keene often played it with the skill of a Lasker, calling "mate in twelve moves" before his opponent even realized that he was in difficulty.

Insiders.—There is still another class of speculators who are called "insiders." They are directors or officials of corporations or in other positions where it is possible to obtain inside information as to the business of the companies whose stocks are traded in in Wall Street. They know things in advance of the public or even the professionals. They are able to speculate on the vantage-ground of certain knowledge, but even insiders sometimes slip in their operations. There have been speculative directors who, selling the stock of their own company short, have found themselves cornered. It is an adage in the Street, that there is no easier way to lose money than to bet on a "sure thing."

Railroads and Industrials.—There are 438 different stocks admitted to dealings in the Stock Exchange, but rarely as many as 200 of these are actually traded in on any one day. About 150 stocks constitute an average day's market. Stocks actually traded in are called active; those not traded in are inactive. A stock may be active to-day and inactive to-morrow, and the reverse. There are two main divisions in the stock-list, namely, railroad stocks and industrials. There are several subdivisions in each of these two classes. The railroad stocks are divided into groups representing systems. For instance, there are the trunk-line group, representing the Pennsylvania, the New York Central, the Erie, the Lackawanna, and the Baltimore & Ohio; the coalers, including the Reading, the Jersey Central, the Lehigh Valley, the Delaware & Hudson and the Lackawanna, which are carriers and miners of anthracite coal; the Grangers, which include the St. Paul, the Northwestern,

the Burlington, the Rock Island, and other lines in the grain-producing section of the country; and the transcontinental stocks, comprising the Union Pacific, the Southern Pacific, the Western Pacific, the Atchison, the Northern Pacific, and the Great Northern, which are lines stretching from the Middle West to the Pacific. The traction stocks are those of the leading street-railway systems. The industrials are divided into groups representing manufacturing, mercantile, oil, gas, electric, and other companies. Both classes of stocks are further subdivided into groups representing ownership. For instance, there is the great Morgan group comprising railroads, industrials and banks; the Standard Oil or Rockefeller group, also of railroads, industrials and banks; the group long identified with the Gould estate, the Vanderbilt group, the Union Pacific, formerly the Harriman group, the group formerly controlled by Edwin Hawley, the Hill group and others.

It is important to keep these different classes and groups in mind in order to understand Wall Street, for the stock-market is a collection of many small markets, each distinct from the other and subject to special influences, and yet bound to the others by certain great forces. There are days when the entire list rises or falls, swayed by some irresistible influence which controls the movements of prices without distinction of classes or groups or names. On other days, however, the different groups move independently of each other. For instance, if the banks are discriminating in loans against unlisted stocks, these may be very weak while the rest of the stocks may be strong. At other times the industrials advance, while the railroad stocks, perhaps because of a war of rates or some adverse legislation, may decline. Bad crop news, which would depress the Grangers, might not have any effect on the transcontinental stocks. A

strike of miners would hurt the coalers, but might not affect the Grangers. There is, however, a strange thing in the market which is called "sympathy," and it sometimes happens that one stock or group of stocks will have a sympathetic effect upon another, although there is no close connection between them. The market, as a whole, taking one month with another, reflects the average industrial and agricultural conditions of the country; and it is thus true that "Wall Street is the accepted mirror and barometer of all American business."*

* F. W. Hirst, Editor of the *London Economist*.

CHAPTER VI

INVESTMENT, SPECULATION AND GAMBLING *

So fundamental to a right comprehension of the function of the stock-market is an understanding of the distinctions between investment, speculation and gambling that a further and more detailed statement is needful. The Hughes Commission put a discussion of these distinctions into the very beginning of its report on the Stock Exchange, and rightly so, because the existence of the Wall Street system depends upon a correct conception of these differences, for, if speculation is immoral, it should, if possible, be prevented.

During a visit at the house of a relative in Pasadena, the author became acquainted with his next door neighbor, a man who had spent his life in the far Western country. One day he came to the writer, with a triumphant smile on his face, and a bottle in his hand. He poured out a little of the contents of the bottle that I might see it. "Look," he said, "it is petroleum from my oil well."

He then proceeded to tell how he and two friends had prospected for oil in Southern California, and finally put \$26,000 in purchasing the territory and boring a well. "It was a gamble," he said. "We bet \$26,000 that there was oil in the well we located. We have won the bet."

He was mistaken; it wasn't a gamble. It was a speculation at least so far as this man was concerned. For he understood the oil business, and being familiar with

* A part of this chapter is taken from an address delivered by the author before the Episcopal Church Congress of the United States, held in Boston in 1909.

the characteristics of oil territory, he had not risked his money until he had gone over the ground thoroughly, noted every feature, made measurements and tests, and finally located the place for a well with a judgment which the results proved to have been sound. He took risks, indeed, large risks. His use of his money was not an investment, as it would have been if he had bought a known producing property. It was a speculation. He did not know that there was oil there. But he had faith that there was oil and acted on that faith.

Definitions.—An investment is an operation based on sight or knowledge.

A speculation is an operation based on faith.

A gamble is an operation based on chance.

One writer declares that investment is a science and speculation is an art. But both are equally science and art.

Suppose, however, that this Pasadena man had been without the experience necessary to take intelligent risks. Suppose he had bought a prospect blindly without consideration, investigation, study. He might have "struck oil," but it would have been a gamble quite as much as if he had bet his money on the turn of a card. Suppose now that this oil operator should form a company to take over the oil well that he has discovered, and should issue a prospectus offering the stock for sale. Suppose that this prospectus gets into Eastern capitalists' hands, and attracted by the prospect of ten, twenty or forty per cent. profits, one of them thinks of buying some of the stock. What does he know about oil wells in general or that oil well in particular? He is 3,000 miles away, and proposes to bet his money merely on what a stock circular says. That would be simply gambling. A California miner once said that no one had any business to put his money into mines except

the professional miner who knew the business, or else a rich man who could afford to lose his money. Everybody else who invested in mines was essentially a gambler.

It is not too much to say that there is more gambling by honest but misguided folks, who put their money into projects that they know nothing about, than there is in the margined operations of the New York Stock Exchange, the bulk of whose business is done by men who have at least some understanding of the art of taking large risks intelligently.

Now suppose this Pasadena oil man in capitalizing his oil well for the stock company should issue and sell at par \$1,000,000 stock for property worth \$100,000. In such a case he would be a crook, a thief, quite as much as the professional card player who plays with marked cards. He could not be strictly called a gambler, for he would be putting his money on "a sure thing." But he would be a thief, quite as much as if he held up a man at the point of a pistol and stole the contents of his pockets. And any newspaper which printed the promoter's lying prospectus as a paid advertisement, having a pretty shrewd idea of its true character, would be his partner in a criminal transaction.

It is unfortunate that the words "investment," "speculation," and "gambling" should be used so loosely, without a clear conception of the difference between them. One is often employed in place of the others. Many a beautifully printed prospectus speaks of a project as an "investment" when it is nothing else than a gamble, while the word "speculation" has, through long and constant misuse, acquired a popular odium which does not rightly belong to it.

If we restore the true meanings, we shall promote sound thinking on some important subjects. Even the

report of the Governor Hughes Commission, admirable as it is, in most respects, is not altogether clear in the distinctions it makes between investment and gambling. While it shows conclusively the economic advantages of speculation, it reveals some confusion of thought which is liable to do harm in befogging the issues at stake. In saying that speculation may be wholly legitimate, or pure gambling or in partaking of the qualities of both, the report is far less accurate than in declaring that a distinction exists between speculation which is carried on by persons of means based on intelligent forecast and that which is carried on by persons without these qualifications. Speculation is never gambling, though the machinery, which is created to facilitate the operations of speculation, may be used by gamblers.

Confining ourselves to the business of the Stock Exchange, investment is the purchase of securities to keep for income. In making such a purchase safety is the primary consideration, the amount of the income is important but secondary. What the investor is really doing is buying an income, but it is of the first importance to him that the income should be safe. In investment, therefore, risk is reduced to a minimum.

Stock speculation is the purchase of securities, usually on margin but sometimes outright for cash, with the object of selling again at a higher price, or else of selling the securities at one price with the object of buying them in later at a lower price. Income and safety are essentials in investment; risk and profit in speculation. To secure profit the speculator is willing to take larger risks than the investor, so that speculation implies intelligent risk. Gambling is blind chance. All three operations can be carried on by the machinery of the market, and it is difficult to distinguish between them, but they should not be confounded, one for the others. They

are three different things. The market should by its rules strive to reduce gambling to the smallest possible proportions, but to destroy the opportunities for speculation in order to prevent gambling would be like killing a man in order to get rid of a wart on his nose. These definitions are substantially confirmed by no less an authority than Thomas F. Woodlock. Quoting C. M. Bergstresser as saying that speculation begins and gambling ceases, when foresight enters, Mr. Woodlock goes on to show that the true distinction between stock speculation and gambling lies not in the act performed, but in the state of mind* of the man performing it. What he means is this: Three men buy 1,000 shares of Pennsylvania stock. A buys for investment intending to keep for the income from dividends. B after intelligent study of railroad, market and general business conditions, buys the stock in order to be able to sell later at a higher price, just as a merchant may buy a million yards of cotton sheeting with the intention of selling later at a profit. Both may or may not employ their credit in making the purchase, but the operation is a speculation. C buys the stock blindly. He simply bets that the price will advance. In A's case the risk is small; in B's case the risk is large but intelligent; in C's case the transaction is all risk, mere blind chance.

Same Machinery for All.—Now all three of these operations are conducted, as has been stated, by precisely the same market machinery, and to the observer they may appear exactly the same. What complicates the problem of separating the good from the bad is the

* The same thing is said by President Hadley: "The difference between legitimate speculation and gambling lies neither in the subject matter nor in the form of the transaction, but in the intent and purpose. Legitimate speculation involves anticipation of the needs of the market and power to assume risks in making contracts to meet these risks."

fact that the man, who may think he is investing and honestly intends to do so, may, through ignorance and folly, be employing his money in a gamble; while the professional speculator may, by the exercise of intelligent foresight, be more truly a conservative and constructive force in the community than the foolish investor. The outright purchase of \$10,000 bonds by an ignorant investor may, under certain conditions, be more truly a gamble than the purchase of 1,000 shares of common stock on 10 per cent. margin by a shrewd speculator.

The question therefore presents itself: Is it worth while to enact laws to prevent speculation in order to make gambling impossible? If it is not worth while to do that, is it possible by new rules and regulations to destroy the opportunities for stock gambling while preserving the opportunities for speculation? What has already been said shows how difficult is the problem of separating the two without destroying both. The Hughes Commission met this difficulty in its study of the subject. "The problem," it says in its report, "wherever speculation is deeply rooted is to eliminate that which is wasteful and morally destructive while retaining and allowing free play to that which is beneficial. The difficulty in the solution of the problem lies in the practical impossibility of distinguishing what is virtually gambling from legitimate speculation."

The Commission in dealing with this difficult problem acted on the principle that Exchanges can accomplish more than legislatures; in other words that regulation of the market by the Exchanges is to be preferred to regulation by the government, and this is the judgment of all who have studied the subject deeply. The Hughes Commission recommended a number of changes in the Stock Exchange system, nearly all of which have been

substantially adopted by that institution. But even with these changes it is still possible to gamble in stocks, and even if the Exchange were abolished, the gambling would continue and be even worse than under the present system of a regulated market. Yet there are a number of publicists who propose to enact laws intended to make speculation in stocks impossible, unmindful of the disastrous consequences of such a policy. The results of governmental interference with the operations of a free market were clearly shown by the experience of Germany, which, after several years of attempted regulation of speculation to an extent that amounted to practical prohibition, has recently been obliged to reverse its policy which resulted in driving away business that was beneficial without preventing secret and demoralizing gambling operations.

Interference With Economic Law.—All attempts unduly to interfere with economic law result in disaster.

The Supreme Court of the United States in the celebrated Board of Trade case (opinion rendered by Justice Holmes) declared:

The plaintiff's chamber of commerce is, in the first place, a great market, where, through its eighteen hundred members, is transacted a large part of the grain and provision business of the world. Of course, in a modern market contracts are not confined to sales for immediate delivery. People will endeavor to forecast the future and to make agreements according to their prophecy. Speculation of this kind by competent men is the self-adjustment of society to the probable. Its value is well known as a means of avoiding or mitigating catastrophes, equalizing prices and providing for periods of want. It is true that the success of the strong induces imitation by the weak, and that incompetent persons bring themselves to ruin by undertaking to speculate in their turn. But legislatures and courts generally have recognized that the natural evolutions of a complex society are to be touched only with a very cautious hand, and that such coarse attempts at a remedy for the waste in-

cident to every social function as a simple prohibition and laws to stop its being are harmful and vain. This court has upheld sales of stock for future delivery and the substitution of parties provided for by the rules of the Chicago Stock Exchange. *Clews v. Jamieson*, 182 U. S., 461.

A Civil War Illustration.—It is recorded that the one time Abraham Lincoln used strong language in the White House was when Governor Curtin referred to the Wall Street gambling in gold during the awful crisis of the Civil War. "Curtin," said Lincoln, "what do you think of those fellows in Wall Street who are gambling in gold at such a time as this? For my part, I wish every one of them had his devilish head shot off."

Even as Lincoln spoke, the Government began to use its power to prevent this gambling in gold and a law was enacted having that end in view. It remained on the statute books, however, only a few days. Why?

Because the attempt to regulate or limit the market by governmental action only made matters worse. Gold quickly advanced from 198 to 250, and instead of the evil being done away with, it was actually aggravated. Moreover, bad as the gambling in gold was, the market transactions—even the speculations—in gold were beneficial to the country; and the establishment of the Exchange where the transactions in gold were carried on, and which for a number of years virtually controlled the business of the country, was an economic necessity. More than that, countless people at that time were obliged to sell gold "short," that is, to sell something they did not own, intending to cover in the future, in order to protect themselves in their mercantile operations; and instead of selling short under these conditions being a wicked and gambling process, it was described as being absolutely essential to the conduct of legitimate business; and Horace White declares that not

to have sold "short" at that time would have been to make all business a gamble. In other words, by using the speculative market, merchants saved themselves from greater speculative risks in their own trades. That, in fact, seems to be one of the uses of the speculative exchanges, namely, that they make the legitimate operations of life less hazardous and, therefore, less of a gamble.

Mr. White is confirmed by President Hadley of Yale University, who says in the "Cyclopedia of Political Science:"

The law, under the pressure of public sentiment, was obeyed; but its results were the very reverse of what the public had anticipated. The event proved that gold speculation had been the means of steadying the market; without it gold rose 100 per cent. in two weeks, and then dropped 50 per cent. at the hurried repeal of the prohibition.

Short Selling.—This incident is a good illustration of the value of short selling which is not always either immoral or injurious. What on its face may look like the depreciation of other persons' property may, and often is, an act of the highest conservatism. If there had been no "shorts" to cover in the panic of 1907, the whole market would have completely collapsed, and the entire business of the country would have suffered irreparable injury. Speaking of short sales Judge Barnard, of the Circuit Court of the District of Columbia, said in rendering judgment in a Stock Exchange case:

A short sale is not a gambling operation. The law defines a gambling operation to be one where the parties make a contract of purchase and sale without intent on the part of either to deliver or receive the article which is the subject of the contract. Nothing passes between the parties beyond the money from loser to winner, and nothing else was intended to pass. This is a mere bet—a gamble. But where actual delivery is made of the goods

contracted to be sold and received the transaction becomes a commercial one. The testimony shows that in a short sale delivery of the stocks sold is made, and the purchase price paid. That fact establishes it as a commercial transaction. It may be speculative; it is speculative; but commercial transactions generally are more or less speculative, the speculative element in them varying mainly in degree.

The Two Sides of Speculation.—We have in the incident related of Lincoln's administration clearly set before us the two sides of this question of Wall Street speculation.

One side is plain enough. When we see the gamblers gambling on the hazards of the nation; when we see them swindling innocent investors by false prospectuses, deceitful advertising and manipulative schemes; when we see the market-place converted into a Monte Carlo, in which stalks the grinning skeleton of dishonor, moral degradation and suicide; when we see the gambling mania spread over a nation, making sober industry seem mean and contemptible and creating a morally unhealthy and economically unsound hunger and thirst after riches rapidly attained and a luxury that corrupts the foundations of civilization; when we see that out of these conditions spring the tempest and fury and awful collapse of panic with its resultant misery and poverty; when we see all these things, we are tempted to exclaim with Lincoln, "I wish that every devilish head of them could be shot off;" and we can in part realize the feelings of Christ when He whipped the money-changers out of the temple.

If this were all of Wall Street, then, wipe it out. But there is something more in Wall Street than gambling. Every economic writer recognizes the fact that speculation is inherent in all commerce and is an indispensable part of the modern organization of business.

The essence of speculation is risk, and risk is inherent in all commercial and credit transactions. If the taking of risks is immoral, then all trade is wicked. That in fact was once the universal belief. President Hadley says that to the mediæval economist, the merchant was a licensed robber, while the modern economist sees in him a public benefactor.

Value of Speculators.—The difference between speculators and other men engaged in business is not that the former take risks and that the latter take no risks, but that the speculators assume larger risks; and the more risks the speculators take the less are the risks of the ordinary processes of commerce. In this fact is to be found one of the important uses of the speculative market. "In so far," says Professor Emery of Yale, one of the foremost authorities on this subject, "as we do away with business speculation, we make all business, whether in the purchase of commodities or the investment of capital, more speculative than it would otherwise be."

The facts in the case are simply, but clearly, stated by Hadley, who says:

Every right-minded person must deplore the extent to which speculation is carried at the present day. But side by side with the wrong side of speculation, which does much harm, there is a right kind of speculation which seems to be an absolute necessity for the successful and regular conduct of modern industrial life.

Balance Wheel.—Speculation is a part of the great system of distribution to which credit and transportation belong—it performs in its way the same service for the world that credit and transportation do. It facilitates the process of distributing products to consumers. Henry George likened speculation to a balance

wheel, by which the whole machinery of industry is regulated.

We have three or four basic facts to base our opinion and policy upon:

1. Speculation in its proper use is indispensable and beneficial to mankind.

2. The organization of speculation can be and is subject to gross misuses, the effects of which are evil, demoralizing and sometimes assume the proportion of national disaster.

3. Attempts to regulate speculation by governmental action have invariably resulted in doing more harm than good.

Thirty years ago Henry Ward Beecher was asked by a New York Legislative Committee what was his opinion of the moral effect of a speculative transaction. The answer he gave is the only answer that we can give.

"When it is done properly," he said, "I think well of it; when it is done poorly, I think poorly of it."

The question is whether it is better to suffer the disaster which the destruction of the machinery of speculation would entail in order to get rid of the evil incident to speculation, or to maintain the system in spite of the evil in order to obtain the economic benefits of speculation.

There is nothing immoral or uneconomic in the taking of risks. If it had not been for men willing and able to take great risks it would have taken a thousand years to have brought about the development of this continent which has been the achievement of only four centuries. But because risk is beneficent, that is no excuse for taking gambling risks, for modern experience demonstrates that gambling is not only wasteful, but demoralizing. But it is a justification for intelligent speculation; and every step one takes, every change one

makes, every operation of business, large and small, is necessarily a speculation. Moreover, there is nothing wrong in speculation by the use of credit, for nearly all of the transactions of modern business are based on credit, as has already been indicated. But while stock speculation performs a large work, the beneficence of which is recognized by every leading economist, that is no reason why everybody may engage in it. The stock-market is frequently crowded with people who have no business in it.

People Who Should not Speculate.—Let us mention several classes of persons who should not enter into stock speculation:

1. Women. More and more women are entering into business and some of them display a high order of business ability. Moreover, every woman should be taught something of the proper use of money in investment. But women as a class should keep out of speculation. There may be, perhaps, half a dozen of them whose experience and ability and means justify them in speculating in stocks, but they are the exceptions. The first essential of a woman's investment of money is safety. That comes first, and there is no second.

2. All persons of limited capital and income. Because a person has saved \$1,000, and that is 10 per cent. margin for the purchase of 100 shares of stock, that is no justification for the speculative purchase of such securities. The vast majority of wage earners, high and low, have not the time, the knowledge or the financial ability, for stock speculation, and this applies also to many professional men and especially to clergymen, doctors and journalists. A man who is continually watching the stock tape has little time left to watch his employers' or clients' business. The journalist, and especially the financial journalist, should keep out

of margin speculation, for the very obvious reason that such operations are apt to warp his judgment and color his writings. The financial writer who is in the stock-market is no longer a disinterested, unprejudiced observer of the stock-market. The merchant who is in business for himself is fitted for speculation in stocks, but even he should be careful not to divide his interests by his stock-market operations so far as to weaken his own legitimate business.

3. All trustees and custodians of other people's money should keep out of the stock-market. Speculating with other people's money is one of the most dangerous temptations of modern times.

REFERENCES

- "Investment and Speculation," Thomas Conway, Jr., and Albert W. Atwood, 1911.
- "The Theory of Stock Speculation," Arthur Crump, 1901.
- "Stocks and the Stock-Market," *Annals of American Academy*, May, 1910.
- "A Plain Guide to Investment and Finance," T. E. Young, 1908.
- "Relation of Speculation to Business," Collin Armstrong, 1908.
- "Investments, What and When to Buy," R. W. Babson, 1908.
- "Speculation a Science," George McL. Irvin.
- "Legislation against Speculation and Gambling," T. H. Dewey, 1905.
- "Speculation on Stock and Produce Exchanges," Henry C. Emery, 1904.
- "Ten Years' Regulation of Stock Exchanges in Germany," Henry C. Emery, 1908.
- "Economics" (Chapter IV), Arthur Twining Hadley.
- "Speculation in Relation to World's Prosperity," M. T. England, 1897-1902.
- "Cycles of Speculation," Thomas Gibson, 1907.
- "Pitfalls of Speculation," Thomas Gibson, 1909.
- "Wall Street Speculation," Keyes, 1904.
- "The A. B. C. of Stock Speculation," S. A. Nelson, 1904.
- "Safe Methods in Stock Speculation," Wm. Y. Stafford, 1902.
- "Success in Speculation," 1888.

CHAPTER VII

VALUES AND PRICES

Every reader of the financial page of a daily newspaper—and there is no other page more frequently consulted—is familiar with the table of figures a column long, headed “Sales at the New York Stock Exchange” or “Quotations for Stocks.” This table is generally presented as follows:

Sales Shares	Stocks	Opening	High	Low	Close	Net Changes
32,610	Amalgamated Copper .	62	64	62	64	+3½
21,200	Lehigh Valley	179½	179½	178½	179½	
40,100	Reading	151½	151½	150½	151½	+1
11,100	Third Avenue	12¾	12¾	9½	9½	-2½
31,800	Union Pacific	173½	174½	173½	174	+1½
90,300	United States Steel ...	63	63½	63	63½	+1½

This is an abbreviation of one day's quotation list. The first column gives the number of shares sold; the second the name of the stock; and then follow the opening, highest, lowest, and closing prices of the day. The last column shows the net change for the day, namely, the difference between the closing prices of to-day and yesterday. The plus sign signifies an advance; the minus sign, a decline; no sign, that the price remains the same. For instance, on this day, 32,610 shares of Amalgamated Copper were sold. Its opening price was \$62.00 a share; its highest price was \$64.00; its lowest, \$62.00; its closing, \$64.00. This closing price was three dollars, twelve and one-half cents a share higher than the closing price of the day preceding. Now, it does not follow that because only four prices are quoted in

this list that there were only four prices during the day. On the contrary, there were possibly a hundred different transactions in this stock, and thus a hundred prices. Every sale made during the day is recorded by the stock-indicator, or ticker, but most papers give only a summary, showing the opening, highest, lowest and closing prices.

Phenomena of Price Changes.—To an outsider the phenomena of sudden changes in prices, even in one day, seem an insoluble mystery; and even the Wall Street expert is often puzzled to account for the frequent and wide divergence of prices and values. Why, it may be asked, should such a stock as Reading sell as high as $151\frac{3}{4}$ and as low as $150\frac{1}{2}$ in one day? Surely, the difference of $1\frac{1}{4}$ in price could scarcely represent any corresponding change in the earning power of the road. Frequently prices fluctuate far more widely than that. A difference of \$10 and even \$25 a share may occur in the price of a stock in two or three hours. In the spring of 1902, American Power broke from 198 to 120 in one day, and in the Northern Pacific corner the common stock of that railroad advanced several hundred points to 1,000. How wide the fluctuations may be in the course of a year is indicated in the following selection from the quotation list of 1910, giving the price changes of two industrials and four railroad stocks:

1910	High	Low.
Amalgamated Copper	$90\frac{3}{4}$	$55\frac{1}{8}$
Atchison	$124\frac{1}{4}$	$90\frac{1}{4}$
St. Paul	$158\frac{3}{8}$	$113\frac{3}{4}$
Reading	$174\frac{1}{4}$	$130\frac{3}{8}$
Union Pacific	$204\frac{3}{4}$	$152\frac{1}{4}$
United States Steel	91	$61\frac{1}{8}$

Even a superficial observer realizes the absolute inconsistency that often exists between values and prices. Logically, the price of a stock ought to be identical with

its true value. In fact, the two are often widely separated. A dividend-paying standard stock of international reputation like St. Paul sells at one hundred different prices in the course of a day or week, and in the course of a year, as has been seen, the difference between the highest and lowest prices, may be \$50 a share, Is there an adequate explanation of this mystery? We are now face to face with one of the fundamental problems of the stock-market.

This difference between intrinsic values and market prices is, however, by no means confined to Wall Street, although it is more strikingly exhibited there. A man owns a house from which he derives a net income of \$1,000. The house is worth, say, \$20,000, and the income of \$1,000 is 5 per cent. on the investment. But if he had to sell the house quickly he might not find a ready purchaser, and would have to sacrifice the property, say, for \$10,000. There has been no change in the actual worth of the house. It is in as good a condition as before, and the income continues, but the price is 50 per cent. of the true value. Or the owner of the property may find that a corporation wants it for some important purpose, and is willing to pay a big price for immediate possession. In this case an urgent demand has advanced the price, although there has been no change in income. Let us carry the illustration further. Suppose the corporation wants the property, but wants it cheap, and is willing to wait a while for it. Thereupon it begins to manipulate the market for real estate in that vicinity, and by various expedients impresses the owner with the belief that the prices of property on the street are likely to decline, and that he had better sell for what he can get now than wait and perhaps do worse. There has been no change in value as measured by income, but manipulation has changed the price.

Apply all this to stocks, and an idea is formed of the conditions that produce the often startling differences between values and prices.

If prices always represented value it would seem as if stocks paying 4 per cent. dividends would sell practically at the same prices; those paying 5 per cent. at higher prices, and so on. That this is not always the rule is shown by the following table, giving the yearly dividends in 1911, and the highest prices of that year of a number of well known stocks:

1911	Dividends	Highest Price
Amalgamated Copper	2	71 $\frac{5}{8}$
Western Union	3	84 $\frac{1}{2}$
American Smelting	4	83 $\frac{1}{4}$
Consolidated Gas	4 $\frac{3}{4}$	148
United States Steel	5	82 $\frac{1}{8}$
New York Central	5 $\frac{1}{4}$	115 $\frac{1}{2}$
Baltimore & Ohio	6	109 $\frac{3}{4}$
Pennsylvania	6	130 $\frac{1}{8}$
Reading	6	161 $\frac{1}{4}$
Southern Pacific	6	126 $\frac{3}{8}$
American Sugar	7	122 $\frac{1}{2}$
Canadian Pacific	7	247
Louisville & Nashville	7	160 $\frac{3}{4}$
Northern Pacific	7	137 $\frac{7}{8}$
General Electric	8	168 $\frac{3}{8}$
Pullman	8	163
New Jersey Central	8	320
N. Y., N. H., & Hartford	8	151 $\frac{1}{2}$
Union Pacific	10	192 $\frac{3}{8}$
Missouri Pacific	None	63

Difficult to Reconcile.—It is not easy to reconcile these differences. Here we have a non-dividend payer selling for nearly as much as a two per cent. dividend stock, a ten per cent. stock selling for less than a seven per cent. stock, one eight per cent. stock selling at 320 and another for 163, almost one-half as much. It seems evident, however, that prices, while controlled by intrinsic value up to a certain point, are subject also to certain laws that do not affect values in the least.

What constitutes value? In the case of a bond its value is measured:

1. By its rate of interest.
2. By the date of its maturity.
3. By the nature of the security pledged for the payment of the principal.
4. By its marketability.
5. By the supply of money seeking investment.

In the case of a common stock value is measured:

1. By the dividend it pays.
2. By the net income of the company after payment of fixed charges and operating expenses, all such net income belonging to the stock.
3. By the character of the management, on which in large measure depends the continuance of dividend payments.

What makes the price? By price, of course, is meant the sum of money for which a stock or bond is sold in the market. Price, strictly speaking, should be value expressed in dollars, and quotations are prices as recorded on the tape or in the market report. The chief influences that make prices are:

1. Intrinsic value.
2. Current news, which may not affect real values in the least, but which Wall Street thinks may enhance or injure values.
3. The condition of the market machinery for speculation. For instance, stringency in the money-market may not affect the earning power of a company in the least, but may temporarily affect the market price of its stock.
4. Manipulation, or the fine art of making prices what the manipulators want them to be, independent of what they ought to be.

5. The market supply of the stock for speculative purposes.

Wall Street is always striving to discount the future, and much of the mystery that surrounds this question of price is cleared up by keeping in mind the fact that the price represents what the Street thinks to-day will be the values of to-morrow or next month or next quarter. Often prices, while at variance with present values, accurately represent future values. Quite as often they do not.

In the case of a railroad stock, its dividend-paying power depends upon the state of trade, the size of the crops, the character of the country through which the roads runs, and also in no small degree upon the skill and honesty of its management. The rate of dividend may therefore change greatly from year to year. Take the case of even such a standard stock as that of the New York Central. From 1869 to 1884 it paid 8 per cent., but in 1885 it dropped to $3\frac{1}{2}$ per cent.; from 1886 to 1889 it paid 4 per cent.; the next two years, $4\frac{1}{2}$ per cent.; in 1892, $5\frac{1}{2}$ per cent.; the next two years, 5 per cent.; in 1895, $4\frac{1}{4}$ per cent.; the next three years, 4 per cent.; in 1899, $4\frac{1}{4}$ per cent.; in 1900 and 1901, 5 per cent. Since 1901, it has fluctuated between 5 and 6 per cent., reaching the latter rate in 1907 and 1910, and later declining.

Uncertainty Breeds Speculation.—It is the uncertainty which attends the business of the great corporations that makes their stocks so attractive for speculative purposes and their prices fluctuate so widely. It follows that if two 4-per cent. stocks sell at different prices, it may be because, first, there is a real difference in their prospects of future income, the earnings of one forging ahead while those of the other are decreasing; or, second, they are subject to differing influences that af-

fect prices and not true values, for it may happen that two stocks of actual value may sell at different prices at the same time.

The average prices of the entire list may, for a considerable period, vary greatly from the true measures of value. Inasmuch as values depend on the prosperity or the reverse of the country, it ought to follow that Wall Street prices should correspond to the actual conditions of trade. This is always true if the period of comparison be made long enough, but it is not always the case for short periods, and sometimes not for a year at a time. For one thing, the stock-market is often ahead of the rest of the country, inasmuch as it strives to discount future conditions, so that an advance in stock values may precede a boom in business, and prices actually waver and decline by the time the activity in trade has reached its height. In like manner a stock may decline on good news, for the reason that the good news had already been discounted by a preceding advance in price.

Manipulation.—But another cause may make one stock or group of stocks, or indeed the entire market, to swerve from the line of value. That cause is manipulation. There exists in Wall Street, as has been seen, a class of professional speculators who make the stock-market their life study and business. These men base their operations, or try to, on values as measured by income, but they study value so as to be able to buy at less than value, and then they work to sell at as much more than value as they can get. They employ every means in their power to make stocks attractive to investors and other possible buyers when they are long and want to sell; or to make the market appear doubtful or dangerous when they are short and want to buy. It has already been shown how large a

part in the market manipulation sometimes plays. For days, weeks, and sometimes for months, prices may represent transient influences more than they do intrinsic value.

The Dow Theory.—Various attempts have been made to construct a scientific theory covering this whole subject of values and prices. The most satisfactory of these is that evolved by Charles W. Dow. His theory is based on the unmistakably sound principle that, in the long run, prices are controlled by values. He discovers three distinct movements of prices in progress so far as common stocks are concerned, namely:

Primary.—This is governed by intrinsic values, and is the most powerful of the three.

Secondary, or, as Mr. Dow calls it, the “swing.”—This is governed by manipulation and by current events temporarily affecting actual values and the market machinery.

Tertiary.—The daily fluctuations.

Trifling causes, a mere rumor, the operations of room traders, may and often do control the price fluctuations of a day. The concerted operations of great operators may, and often do, control the price movement of weeks and months. But the primary movement, that based on value, lasts the longest, and is ultimately the controlling factor in speculation as in investment.

The primary movement lasts generally from four to five years. Thus, there was the bull movement of 1877 to 1881, accompanying the resumption of specie payments and ending in the assassination of Garfield. This was followed by the bear movement of 1881 to 1885, including the panic of 1884. Then there was the bull movement of 1885 to 1889, when the sequence was broken by the Baring panic of 1890, followed quickly by an upward movement due to the large harvest of

1891 and a currency inflation. But the regular sequence was resumed in 1893, when the panic set in, the various effects of which continued until 1897. Then began the great McKinley boom, based on sound money, large crops, and heavy gold production, which lasted until the panic of 1907, with two or three interruptions. Now, in all of these movements the ultimate prices approached very closely to intrinsic values. But in every one of them there were long periods of time when the secondary movement—or swing—was at work, and prices varied greatly from values.

A bicycle rider starts out for a long trip over a road never before traveled by him. The actual distance is 20 miles, but his cyclometer at the end registers 30. This is due to the fact that he has not traveled in the straight line, but has gone from one side of the road to the other in an endless succession of curves in order to avoid teams and ruts. Then, at one point of the road he has missed his way, or has been maliciously misdirected, and thus went four miles before he discovered his mistake and turned back. In like manner prices travel through an endless succession of daily curves or fluctuations, and sometimes miss the road altogether, and, misled by manipulation, travel a long distance astray, but in the end they arrive at the true destination—value.

Thus, in the McKinley boom, the price of stocks, taking the whole period of the movement into view, corresponded with the actual gain in value, but this advance in prices was accompanied by remarkable fluctuations. The boom began in August, 1896, when Wall Street's fear of Bryan's election on a free-silver platform came to an end, and it reached its climax at the time of the Northern Pacific corner and panic of May 9, 1901. During this period of nearly five years the lowest aver-

age price of 20 railroad stocks was less than 42, and the highest average price was nearly 118 on May 1, 1901, a difference of 76, the percentage of advance being 180. This upward movement corresponded very closely to every possible test of value. For instance, bank clearings in New York in this period increased 175 per cent.

But in the case of railroad stocks the best measure of value, as has already been indicated, is the surplus earnings after all expenses, taxes, and bond interest have been paid. The rest belongs to the stock. A calculation shows that the dividend-producing capacity of all the railroads of the United States in the period under review kept pace with this advance in prices. An analysis of the Interstate Commerce Commission reports for the years ending June 30, 1896, and 1900, shows that the net income applicable to dividends increased per mile from \$492 to \$1,180. The dividends actually paid increased from \$484 to \$725 per mile. Statistics covering exactly the period of the stock boom would show a still greater rate of increase. These figures are sufficient, however, to indicate how, in a period of five years, the line of price held true to the line of value.

Conditions of Success.—The speculator, therefore, who studies most closely the conditions that create real value, and bases his operations on what this study of values reveals, is most likely to achieve success. A man died several years ago worth millions of dollars made through operations in copper, coffee, and ostrich-feathers—a strange combination, truly, but his success does not appear strange when it is known that he and his partners made the most exhaustive study of these three products, so that there was nothing worth knowing about them that they did not know. The reason why so many lose money in Wall Street is that they do not base their operations on values, but on chance

or "tips," and they are swept out of sight either by the daily fluctuations or by the still more enduring and more powerful "swings." The secondary and tertiary movements of prices far more than the primary are responsible for the failures of Wall Street.

In this very McKinley boom, when as has been seen, the five years difference between the lowest and the highest prices was 76 points, prices actually traveled over a course of 271 points. There were 15 great movements and swings upward and 14 swings downward, the lines of prices continually doubling upon themselves. These swings were of varying durations. Some lasted only for days, and some for months. The period between April, 1899, and July, 1900, was one of continuous advance in the income capacity of the railroads, the increase being from \$875 per mile in the fiscal year of 1899 to \$1,180 in the fiscal year of 1900; and yet this was in the main a period of falling prices.

For more than a year, therefore, the line of price separated from the line of value. Overproduction of industrial securities, the sudden death of Ex-Governor Flower, then the bull leader, and the opening of the Boer War, involving the closing of the Transvaal mines, and the presidential election, were mainly responsible for this separation. But the influence of value reasserted itself as soon as the Street recovered from the chill of these events, and prices soon regained all the ground they had lost.

The investor can afford to base his operations entirely on value, but the speculator, to achieve success, must not only make a deep study of values, but also learn to calculate upon the force and duration of these market swings. Even the student of value may make mistakes, for it should not be forgotten that speculation is always discounting the future, and is trading on values to be

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established rather than on values that are already established. This accounts for the familiar phenomenon of a stock declining on a piece of good news. That is because the advance has preceded the good news—in other words, discounted it. The insider, or the far-sighted outsider, has foreseen the favorable development and bought in advance of the news. Then when the thing develops and the news is announced he sells to realize his profit, thus causing a decline.

Law of Averages.—An analysis of the stock-market reveals a mysterious law of averages. The great primary movements based on value run in about equal periods of boom and depression. One upward sweep is followed by a downward sweep of about equal length.

There have been constructed in Wall Street elaborate charts or systems by which it is claimed the course of prices can be infallibly foretold. Men who use these systems as a substitute for close study and sound judgment of conditions are as much fools as the young nobleman who some years ago constructed a system for "breaking the bank" at Monte Carlo, and succeeded in only breaking himself. But not a few houses of high standing have charts showing the course of prices through a series of years, and use them as the man of business uses statistics. They have the advantage, for one thing, of showing at a glance whether prices are high or low as compared with preceding periods. It has been shown in the preceding chapter how in the course of ten years the sales of the bear periods have almost balanced the sales in the bull periods. A chart has been made of those ten years fashioned like a checkerboard, in which the bull periods have been left white and the bear periods made black, and it is remarkable that the number of months, almost the number of weeks, of advancing prices equals the number of months and weeks

of declining prices. Prices, therefore, have a tendency to return to the point whence they started. In the course of a year there is apt to be two bull and two bear periods, and the two highest points and the two lowest points are generally about six months apart.

"Wall Street," said Jay Gould, "is like the ocean. No one man can control it. It is full of eddies and currents. The thing to do is to watch them, to exercise a little common sense, and on the wave of speculation to come in on top."

The Woodlock Statement.—In an address before the New York University School of Commerce, Accounts and Finance, Thomas F. Woodlock said:

A. The general trend or tide of prices is determined by fundamental values.

B. This tide is constantly interrupted by eddies which are the result of conditions growing out of speculation and accidents.

C. The eddies in the tide are usually swifter than the movement with the tide.

D. The eddies usually bear some suitable proportion to the movement that has preceded them.

E. As a general rule declines are accomplished more rapidly than advances (because most speculators operate as "bulls").

It is evident that while the chapter of accidents is never done, the movement of prices is by no means so irregular as to be incapable of a certain amount of foresight, and that speculators who bear the above principles in mind, and operate on them, cannot be accused of being mere gamblers. In other words, stock speculation is not of its nature wholly unscientific.

REFERENCES

"Influences Affecting Security Prices and Values," Thomas Gibson, *Annals of American Academy*, May, 1910.

CHAPTER VIII

THE STOCK COMPANY

If there were no stock companies there would be no stock-markets. The stock-certificate, representing as it does present or prospective income, is therefore the very corner-stone of modern business.* A stock company is an association incorporated under the laws of some State, or by the direct act of some legislature, for the purpose of transacting business. It is composed of a number of persons who share in its capital and whose interests in its profits are represented by shares of stock. The company gives each stockholder a certificate showing how many shares he owns.

Advantages of the Corporation.—In a legal sense the corporation is a person, with the same powers that a person possesses to act and to sue. Yet the persons who compose the corporations have, individually, no control over it or rights on the property it may own. A contract made with a corporation is not made with the stockholders individually. The corporation, therefore, is a person without personality. Hence the aphorism that “corporations have no souls.”

Formerly nearly all business was conducted by individuals or by firms. Now, however, the tendency is to convert all lines of business into stock corporations. A

* “I weigh my words, when I say that in my judgment the limited liability corporation is the greatest single discovery of modern times, whether you judge it by its social, by its ethical, by its industrial or, in the long run,—after we understand it and know how to use it,—by its political, effects. Even steam and electricity are far less important than the limited liability corporation, and they would be reduced to comparative impotence without it.”

NICHOLAS MURRAY BUTLER.

company presents many points of advantage over a partnership, not the least being that it gives continuity to a business. It secures what is called a perpetual succession. A partnership usually expires by limitation in a certain number of years or by the death of a partner. A company goes on without a break. It may be difficult to divide a business at the expiration of a partnership or at the death of one of the partners, but the death of a shareholder causes no interruption to the business of a company, and the interest of the deceased is easily transferred to his heirs or sold in the market and the proceeds divided among them. Moreover, the shareholders have the great advantage of limited liability. That is to say their liability is no greater than the amount they put into the enterprise, or voluntarily assume.

Another important advantage of a company is that it provides a convenient method of aggregating capital so as to be able to conduct business on a large scale. A man with \$10,000 is incapable of any extended enterprise, but 100 men with \$10,000 each represented in a stock company give a capital of \$1,000,000. A firm with 100 partners would be a monstrosity; but a company with 100 or 1,000 stockholders is easily and effectively managed.

Par Value.—The capital stock of the company is divided into denominations of a certain specified par value, as, for instance, \$5, \$10, \$50, or \$100. Shares of \$100 each are the rule in the companies represented in the Stock Exchange, although there are notable exceptions, Reading stock, for instance, being divided into shares of \$50 each, and there are stocks, like the Great Northern Ore Certificates, which have no par value, but which simply represent equal shares in the property and its profits, and which are worth exactly what they sell for in the

market. The Railroad Securities Commission appointed by President Taft strongly favored the elimination of par value as a cause of confusion to investors and of bad legislation. In its report, the Commission says:

We do not believe that the retention of the hundred dollar mark, or any other dollar mark, upon the face of the share of stock, is of essential importance. We are ready to recommend that the law should encourage the creation of companies whose shares have no par value, and permit existing companies to change their stock into shares without par value whenever their convenience requires it. After such conversion any new shares could be sold at such price as was deemed desirable by the board of directors, with the requirement of publicity as to the proceeds of the sale of such shares and as to the disposition thereof; giving to the old shareholders, except in some cases of reorganization or consolidation, prior rights to subscribe pro rata, if they so desired, in proportion to the amount of their holdings.

As between the two alternatives of permitting the issue of stock below par, or authorizing the creation of shares without par value, the latter seems to this Commission the preferable one. It is true that it will be less easy to introduce than the other, because it is less in accord with existing business habits and usages; but it has the cardinal merit of accuracy. It makes no claims that the share thus issued is anything more than a participation certificate.

This same suggestion was made years ago by the eminent corporation lawyer and publicist, Edward M. Shepard, but the official endorsement of President Taft's Commission gives it increased force.

The Promoter.—In the formation of a new company, the "promoter" comes first. Many imagine the promoter to be a recent development of Wall Street. He has, indeed, enjoyed special prominence in the last few years, because of the immense number of new companies organized, but he has existed in one form or another for centuries.

Of course, the history of no two companies is exactly the same. But if a great industrial company is proposed, the promoter may, in general, be said to follow one of two lines of procedure. He may interest the different manufacturers in a certain line of trade and induce them to combine, and if successful in forming a combination, he may be rewarded with a large interest in the new company. Or, being satisfied that such a combination would be profitable, he may obtain options for the purchase of the different plants. An option is the payment of a certain sum of money for the right to buy a plant or business, or any other thing of value, within a specified time and at a specified figure. If the option is not used within the time limit the promoter loses the sum he paid for it.

The Underwriter.—Whatever line of procedure is adopted, the next step is to secure the backing of some banking-house, the larger and more influential the better. The banker looks into the scheme carefully, and with the aid of experts and accountants examines the different plants, surveys the proposed field of operations, and ascertains the present and prospective demand for the product to be marketed. If satisfied that the scheme is a feasible one, the banker undertakes to underwrite it—in other words, to supply the money necessary to effect the combination, organize the company, and to market the securities.

The Corporation Lawyer.—At this stage the corporation lawyer is called in. He attends to all the legal matters involved in the transaction, advises as to the State the company should be incorporated in, draws up the necessary papers, and sees that no laws are violated and that every legal requirement is observed. The plan of the company has probably been laid out by the promoter, and is

now adopted as amended by the banker and his lawyer. The amount of capital is determined, and the division of capital into stocks and bonds is fixed upon.

The Syndicate.—Then comes the underwriting syndicate. The banker may be unable or unwilling to provide all the immediate cash required and assume all the risk, so he calls in other bankers and capitalists and a syndicate is formed. The company having been incorporated, it is likely that after the persons originally concerned in its organization have taken a proportion of the stock, a considerable amount, and perhaps nearly all, remains to be sold to the public. The banker, if his reputation is high and his connections wide, is usually able to attend to this. His indorsement may commend the securities to investors. But sometimes the services of a stock-market manipulator are required in order to prepare the market to absorb the new supply of stocks and bonds. In order to market these, it is necessary to have them listed in the Stock Exchange. Before this can be done they are probably traded in on the curb. The new securities now get into the hands of the broker, pass through the Stock Clearing-House, are hypothecated for loans at the banks, and finally reach the investor, who locks them up in his safe-deposit vault and waits for the interest and dividends.

The progress of a certificate of stock from the producer to the consumer, from the organizer to the investor, may be summed up as follows:

1. The promoter.
2. The banker.
3. The corporation lawyer.
4. The underwriting syndicate.
5. The incorporation.
6. Issue of stock certificates.
7. The stock-market manipulator.

8. The curb market.
9. Listed on the Stock Exchange.
10. The stock-broker.
11. Hypothecated for loans at the bank.
12. The investor.

In the case of railroad, gas, or other companies requiring public franchises other steps have to be taken. To build a railroad, the sanction of commissions, courts, and legislatures must be obtained.

Before 1892 the majority of companies were incorporated in New York, but for many years New Jersey incorporated more big corporations than any other State.* Nearly one-half of all the large industrial companies represented in the Stock Exchange have New Jersey charters, including the greatest corporation ever formed, namely, the United States Steel Corporation, with a capital of \$1,018,000,000 stock and \$300,000,000 of bonds. The Northern Securities Company, with \$400,000,000 capital stock, controlling other companies having \$642,000,000 of outstanding bonds, was also a New Jersey corporation, but was declared a violation of the Sherman anti-trust law. The laws of that State are exceedingly liberal to corporations. The New Jersey company is required to maintain an office within the State, this office to contain a stock transfer book and a stock ledger, and to keep open in business hours for the transfer of stock; and the annual meetings of stockholders must

* Of the 262,490 corporations reporting in 1910 to the Commissioner of Internal Revenue, New York had 31,132, Pennsylvania 18,362, Illinois 17,908, California 16,088, Ohio 14,294, Missouri 11,162, Massachusetts 8,800, Wisconsin 8,483, and New Jersey 8,403, but New Jersey is the home of the big holding companies. William J. Gaynor, declaring that five-sixths of the trusts were incorporated in New Jersey, argued that a repeal of its law giving life to holding companies, would solve the trust problem. Edward S. Meade's "Corporation Finance" and John J. Sullivan's "American Corporations" give adequate accounts of the sweeping powers of the New Jersey corporations.

be held there. But the company may do a business in any part of the world. Its directors may have their office in Wall Street, and its factories may be in Boston and San Francisco.

Moreover, the articles of incorporation, if well drawn by a competent lawyer, can give the company power to engage in almost every line of business. It may manufacture carpet-tacks, finance trusts, and operate railroads all at once. Moreover, if nothing is said to the contrary in the incorporation papers, the company becomes a perpetual corporation.

If stock is to be issued for plants or other property, the promoters can put any value they please upon the property, and authorize the issue of stock in payment; and the State of New Jersey accepts this valuation without question. This makes stock watering easy. Only three incorporators are needed, and two of these may be dummies, and the interest of all three in the concern may not be more than \$1,000. On payment of an incorporation fee, and with an initial investment of only \$1,000, three men can in one day incorporate a company in New Jersey with powers to do almost anything and everything under the sun. It is not surprising that New Jersey grew rich from the incorporation of big companies, and especially the so-called "holding" companies.*

The Trust.—James B. Dill, the well-known lawyer, who was noted for the number of companies he incorporated, strongly recommended, in an address in Boston, the passage of a law by Congress under which companies could obtain a national incorporation, securing certain valuable rights from Congress over State-incorporated

* It does not necessarily follow that because a company is incorporated in New Jersey it is intended simply to exploit the public, for a great many reputable capitalists have availed themselves of the liberal laws of the State for legitimate purposes.

companies, but also being subject to a certain amount of governmental supervision. This he advocated as meeting, in large measure, the problem of the "trusts," and the idea has been since adopted by a number of political and industrial leaders.

A trust, in the true sense of the word, is a combination of companies, the majority stockholders of which assign their shares to a certain number of trustees, giving them an irrevocable power of attorney. This effective form of combination has gone out of existence, having been declared illegal under the Sherman anti-trust law. The Standard Oil Corporation used to be a trust of this kind, but afterwards became a regularly organized holding company, which was also declared illegal in 1911 and dissolved.

Prof. J. F. Jenks has described a trust as "a combination of manufacturing corporations with so great capital and power as to be considered by the public to have become a menace to its welfare and to have temporarily, at least, considerable monopolistic power."

A more precise definition is that adopted for the purpose of the twelfth census, and which may therefore be accepted as an official definition. This defined a trust to be a company, organized to own and control a large number of factories or mills which were formerly independent of each other, and whose business extends over the entire country; or else a company organized simply for the purpose of owning and holding the stocks of other corporations, but not directly owning the plants or carrying on the business of manufacturing.

Holding Companies.—Holding companies are a comparatively recent discovery, but there are several that have been in existence for many years. This scheme of combination was brought into special prominence by the organization of the Northern Securities Company for

the purpose of holding the stocks of the Great Northern and Northern Pacific Railroads, which was judicially declared to be illegal. The holding company is an effective agency for the promotion of monopoly, and yet it has been used for effecting beneficial consolidations that did not create monopolies. The chief objections to the holding company are summed up by the Railroad Securities Commission as follows:

Any artificial stimulus to these intercorporate holdings is a public evil. Where a railroad controls the operations of another railroad by owning a majority of its stock, or where a holding company controls the operations of several roads in the same manner, we have all the disadvantages of consolidation, without getting all of its advantages. We get the centralization of financial power; we do not get all the economy of operation which should go with it. Apart from this general danger, we open the way to several specific evils.

Where a railroad controls the operations of another road by the ownership of a majority of its stock, there is constant danger that the minority holders will not be fairly treated. The road thus purchased has become part of a large system, and is operated by the representatives of the whole system. It is almost certain that the advantage of the whole will be preferred to the separate interests of the part in matters of operation, traffic and finance.

Again, the existence of two or more companies under the same management, having separate organizations but united control, invites the concealment of financial transactions by the shifting of charges from one company to another.

Change in Meaning.—It is thus seen that the meaning of the word "trust" has changed.

First, it meant a number of formerly competing companies combined by means of a limited number of individuals acting as trustees.

Second, it meant the same combination effected by means of the control of the different companies being owned by a holding company.

Third, it now practically means any big corporation which has acquired great wealth and power so as to exercise what amounts to an overshadowing influence in any given trade.

Stock Watering.—In the organization of companies several evils have developed, one being “stock watering.” This is the very felicitous Wall Street term for fictitious capitalization. It has been said by bankers who ought to know that large industrial companies have been so vastly overcapitalized that the common stock represented “water” or no actual investment, and that only the preferred stock represented actual investment. This assertion seemed to be confirmed by Bulletin 122 of the census of 1900. This gave the amount of stocks and bonds actually issued by 183 industrial corporations, covered by its report, as \$3,085,200,868, while the true value of the capital invested is only \$1,458,522,573. The preferred stock of these companies was \$1,066,525,963, slightly less than the true value.

Capitalizing Earning Power.—In capitalizing a new combination the usual rule was to capitalize the earning capacity rather than the money actually invested in the plant. For instance, if the actual cost of a plant was \$1,000,000, while its earning capacity is \$300,000 a year, it might not be capitalized at cost, which would yield 30 per cent. dividends, but at, say, \$3,000,000, which would yield 10 per cent. It may be said in justification that, while the plant may have cost only \$1,000,000, its true value should be measured not by what it cost, but by what it earns, and that the capitalization of \$3,000,000 therefore represents value, not water.

Capitalizing Possibilities.—But in many instances the plant is capitalized not on the basis of what it earns, but what it might, could, or should earn, and that in addition the capitalization is swelled by the bonuses de-

manded by the promoters and bankers. James B. Dill, in writing on this subject, has shown how plants worth, say, \$5,000,000 may be capitalized for \$30,000,000, the difference representing in no sense of the word true value, but simply the water injected into the enterprise, just as the dishonest dairyman waters his milk. Then, says Mr. Dill, the promoter and the banker sell their stock for what it will bring, and the company is left in the hands of stockholders with immense charges to pay on watered stock. Mr. Dill said that this evil could be prevented by a law like that existing in England, which prohibits any promoter or company to advertise the capital stock for sale without stating the actual amount paid into the company.

The industrial commission appointed by President McKinley recommended that all the States enact laws to prevent stock watering like those existing in Massachusetts. It was shown by evidence produced before this commission that some trusts have been financed on this basis: For every \$10 of cash or tangible property secured \$60 of stock was issued, representing \$15 to the promoter, \$20 to the seller entering the combination, and \$25 to the underwriting syndicate.

Corporation Problem.—In view of the enormous contribution limited liability stock companies are making to the civilization of the world, and of the opportunity they give of abuse of power, the question of their proper promotion, organization, size, capitalization and administration has become one of the gravest problems in this country at the opening of the twentieth century. The future of American business depends upon a solution that will preserve the co-operative advantages of stock companies without the danger of their becoming more powerful than the governments which grant them their privileges. That solution must be worked out by those

who comprehend both the inestimable benefits and the necessary limitations of co-operation in accomplishing the world's work.

As an aid to solution, it may be useful to recapitulate the chief benefits and the chief evils of stock companies.

Benefits.—1. Co-operation: By bringing a multitude of capitalists together in the advancement of a single enterprise.

2. Efficiency: By creating an organization strong enough to engage in big competition.

3. Economy: By eliminating many of the wastes incident to "individual, cut-throat, parochial competition."

4. Limited liability: By which many individuals may become partners in an enterprise without risking more than they individually put into it.

5. Continuity: By establishing a corporation, the continued existence of which does not depend upon the life of any one engaged in it.

6. Diffusion of wealth: Which is made possible by the shares of stock, so issued as to make investment easy, even for persons of small means.

7. Concentration of control: By which it is only possible to secure the highest effectiveness of administration.

8. Democracy: Because the stock company is organized like a republic, and is based upon the right of suffrage, stockholders being the citizens of the corporation; and because in a stock company everybody is an employé; and therefore with the rapid substitution of stock corporations for individual and partnership business, the old distinction between capitalist and laborer is gradually eliminated, for everybody becomes at once capitalist and wage earner.

9. Mobility of capital: By the ease, convenience, and

safety, with which capital can be transferred from one owner to another, by means of the negotiable stock certificate and by the admirable simplicity of stock-market methods.

10. Measure of value: Because the market price of a stock certificate constitutes the best attainable method of valuation; and every owner of a listed security knows what he can get for it by sale, or as security for a loan.

Defects.—1. Impersonality: The stock company is a sort of legalized person without personality, hence the saying that "a corporation has no soul." There is a large measure of truth in the statement made by Rabbi Wise that "business which has become too largely impersonal, needs to be repersonalized"; so that, as Thoreau says, "a corporation of conscientious men shall be a corporation with a conscience." To that fine ideal we are approaching more speedily than many people imagine, for too many of us are apt to think the worst rather than the best of existing institutions.

2. Monopoly: Undoubtedly the stock company makes monopoly easier of attainment, and the holding company, although not always a monopoly, has become the convenient tool of monopoly, which is odious to the Anglo-Saxon ideal of liberty and equality of opportunity.

3. Power: It has been said that concentration promotes effectiveness of administration and ability for great conquests in commercial competition. But concentration constitutes power; and although the stock company derives its authority and rights from the government which incorporates it, it may, by its accumulation of capital, attain a power mightier even than that of the State. There are several corporations in the United States which are greater than most of the States of the Union. This power even when wisely administered and when, as is generally admitted, it vastly pro-

motes the ability of this country to compete effectively in the markets of the world, excites envy among the envious and fear among many good people, and this gives rise to misunderstanding, political controversy and commercial distress. There is, therefore, the peril of business bossing the government, or of the government bossing business, either of which is bad.

4. Oppression: As in the exercise of all power, so in the administration of the stock corporation oppression has been made possible, because, with stockholders scattered over a wide territory it is difficult to organize them for effective oversight of their business, so that directors may exercise too arbitrary an authority. In England stockholders' meetings are largely attended and constitute effective corporation parliaments. Not so in the United States. But this defect is being rapidly overcome by the extension of publicity, not only that enforced by governmental action, but also by the voluntary action of big companies, which are steadily improving in the character, fullness and timeliness of their regular reports so that stockholders and investors may be well informed.

5. Par value: By which a confusing and mischievous distinction is raised between normal capitalization and market price.

6. Criminal promotion: A lot of financial "crooks" use the stock company as a burglar's jimmy in order to get hold of other people's money. How convenient it is for them to organize a bogus company with a fictitious capital, a flamboyant prospectus, and a lying advertisement, and proceed to induce foolish capitalists to part with their money for a piece of engraved but worthless paper. It was recently estimated that upwards of \$100,000,000 a year is taken in this way out of the pockets of the small savers in this country. Is

it any wonder that this causes many unthinking people to attack the stock company and the stock-market, being unable to distinguish between what is good and what is bad, between the beneficent use, and the incidental abuse.

Organization.—The control of a company is vested in a board of directors, usually elected annually by the stockholders. These directors commonly exercise absolute power, only such questions as a proposed increase in capital being submitted to a direct vote of the stockholders, and sometimes they do not even decide that. The board of directors is, in turn, controlled by an executive committee, and this committee is not infrequently controlled by one capitalist whose interest in the corporation is larger than that of the other stockholders. The annual meetings are usually attended only by a few holders of stocks. Elections are decided by proxies held in the name of one or two of the managing directors. The average stockholder carries his stock merely for the dividends, and leaves the burden of management entirely to the directors. The largest stockholder, as has been said, controls the corporation, even though his individual interest may be less than an actual majority of the stock. There have been cases, indeed, when a company has been controlled by a man whose individual interest was comparatively small. Events have shown, however, that absolute ownership of a majority of the shares may be essential to security of control, though the majority of the big corporations are not controlled in that way by the banking and moneyed interests.* A director of a great corporation whose se-

* There has been more than one instance of the managers of a corporation, apparently in secure control, waking up suddenly to find that the majority of the stock has been bought by some other, and perhaps rival, interest. How to safeguard their control has therefore become a problem with directors. Ten years ago, claiming

curities are listed on the Stock Exchange is an influential individual, with sources of information denied to others. He is, if he uses his opportunities, the true "insider" of the stock-market.

Stock Certificates.—Certificates of stock are engraved pieces of paper, signed usually by the president and the treasurer of the company, specifying that the holder whose name is written on the certificate is the owner of a certain number of shares. It is specified that the shares are transferable only on the books of the corporation in person or by attorney upon surrender of the certificate. On the back of the certificate is printed a blank providing for the transfer of the stock upon sale, the new owner being constituted an attorney for the purpose of transfer. In Wall Street, certificates of stock are usually made out for 100 shares, the bulk of the transactions in the Stock Exchange being in 100 share lots. A man may own 10,000 shares, but he will have them divided into 100 certificates of 100 shares each for convenience. Odd share lots, as, for instance, certificates representing 23 shares, are at a manifest disadvantage in speculation.

Engraving of Securities.—The rules of the Stock Exchange require that certificates of stock, as well as every

that "the day of proxy control is passed," some of the managers of great railroad and industrial corporations schemed to make their control absolute and safe without being compelled to lock up their money in an actual ownership of a majority of the stock. They wanted to control the property and still be able to employ their capital in other enterprises or speculations. In the reorganization of the Chicago, Rock Island & Pacific Railroad a device of this kind was introduced. The control of the road was given to the preferred stock, which elects a majority of the directors. Capitalists owning one-half of the preferred stock, or \$27,000,000, could therefore control a company whose aggregate common and preferred stock amounted to \$150,000,000. This plan is contrary to the American principle of government by the majority, and it has been severely criticised, although it is upheld by a number of prominent capitalists.

bond, must be printed from steel plates engraved in the best manner which will afford the amplest security against counterfeiting. There must be two steel plates, namely, a face-plate containing the vignettes and lettering of the description or promissory portion of the document, which should be printed in black or black mixed with a color; and a tin plate from which should be made a printing in an antiphotographic color, so arranged as to underline important portions of the face printing. The two printings must be so made upon the paper that the combined effect of the whole, if photographed, would be a confused mass of lines and forms, so as to give security against counterfeiting by scientific or other processes. The Exchange requires a distinctive plate for 100 share certificates, so that they may be readily distinguished from certificates representing other amounts of stock. The Exchange also requires that the engraving shall be done by some concern approved by the governing committee. It has therefore been charged with fostering a monopoly, but the Exchange holds that its requirement is necessary for the protection of investors.

Different Kinds of Stock.—It has already been indicated that there are two kinds of stock, preferred and common. In England there are also founder shares, vendor shares, deferred shares, and debenture shares, but these are practically unknown in this country. Preferred stock has a fixed rate of dividend attached to it, which must be paid before the common stockholders can receive anything. Such dividends may be cumulative or non-cumulative. If cumulative, any dividend not paid this year must be paid out of the profits of any future year. The dividends accumulate until paid. Preferred stock differs from a bond in that it is not secured by a mortgage on the property, while the holder, in the

United States, generally has a voice and vote in the management. The preferred stockholder is thus not a creditor, but a preferred partner in the concern. The common stock is entitled to all the earnings after the interest on the bonds and the dividends on the preferred stocks have been paid. Its rate of dividend thus depends on the profits of the company. The common stock is therefore the speculative commodity of the Street. Preferred stock is as a rule bought for investment, and common stock for speculation. Many companies have only common stock, and common stock may become so steadily a dividend payer, and thus so valuable, that it enters into the class of investment securities and is no longer speculative.

Bonds.—Bonds represent the funded debt of a company, and are usually secured by some mortgage on its property. They are of various kinds. The first-mortgage bond usually stands highest, in that it has a first lien on the property covered by the mortgage. In some cases, however, prior-lien bonds are issued, and these, as their name indicates, take precedence. Second- and third-mortgage bonds take rank after the first. Consolidated bonds is a name usually given for bonds issued in place of other bonds, the various mortgages being consolidated. This operation is generally the result of a reorganization.

There are various classes of bonds whose names indicate the character of the security pledged for their payment. Thus, equipment bonds are secured by a mortgage on the rolling-stock of a railroad. Land-grant bonds are secured by lands owned by the railroad, and are redeemed by the proceeds of the sale of the lands. Collateral bonds are secured by pledges of stocks and bonds of other companies held by the corporation issuing the bonds. Collateral bonds have become very promi-

nent in the Street, especially in the last few years. A railroad buys control of a connecting or rival line, and pays for the same by issuing bonds secured by the securities of the line thus acquired. Income bonds are virtually unsecured, and pay interest only when earned. Debenture bonds are very common in England, and are becoming more so in this country. They are practically unsecured pledges to pay. They are similar in principle to the single-named paper of a merchant, discounted by a bank. Convertible bonds are bonds which can be converted into some other form of security, usually stocks.

Registered bonds are bonds recorded on the books of the corporation in the names of their holders to whom the interest is sent. Coupon bonds are bonds to which are attached dated certificates representing the interest due on the bond at the regular periods of payment. These may be cut off from the bond and the interest collected through the banks the same as checks. If not paid they may be collected by suit, the same as the principal.

Foreclosure and Reorganization.—In the case of the default in interest the bondholders can foreclose the mortgage. The legal forms gone through are generally the same as those in foreclosing the mortgage on a house. There is, however, this practical difference: the house is actually sold to satisfy the debt. In the case of a railroad there is a reorganization—that is to say, a general rearrangement of the capitalization on a basis on which the company can pay at least its expenses and fixed charges. In this reorganization, the first-mortgage bondholders enjoying the highest security get the best terms, while the stockholders, to save their interest from being entirely wiped out, are usually subjected to an assessment; they are compelled to supply most or all of the needed additional capital.

The great bulk of the bonds traded in in Wall Street are issued by railroads. Industrial companies, however, have issued them in considerable amounts.

Out of the gross earnings of the company is first paid the cost of its operation. Then must be paid the fixed charges which are the interest on its bonds in the order of their standing. Out of the surplus must be paid, first, the dividends on the preferred stock, if there is any. What remains is applicable to the payment of dividends on the common stock, but the directors may out of this sum use part or all in making betterments or extensions. This payment is usually in such a case charged to operating expenses. Commonly, however, betterments and extensions are paid for by new issues of stocks and bonds, it being considered legitimate to capitalize improvements. Dividends are sometimes paid when not actually earned. The earnings for this quarter may be less than the usual dividend, yet it may be declared either because the earnings of the preceding quarter were larger, or because there is good reason to believe that the earnings of the succeeding quarter will be more, and it is deemed advisable to maintain the same rate. But where the dividends of a whole year are larger than the earnings applicable to dividends, it is clear that a debt has been created for the purpose, and it is needless to say that an increase in capitalization, or the creating of a floating debt, for the purpose of continuing the payment of dividends and thus sustaining the market price of the stock, is illegitimate finance.

Companies have been organized for every conceivable purpose. Besides the two main Wall Street divisions of railroads and industrials, there are several subdivisions, as, for instance, franchise companies, including street-railways or tractions, telegraph, gas, etc.; manufacturing companies; mining companies; and finance and holding

companies. Admitted to dealings in the Stock Exchange are the securities of steam, electric, and cable railroads, coal, iron, copper, express, telegraph, telephone, electric-light and power, gas, mining, chemical, bicycle, cotton-oil, spirits, tobacco, snuff, sugar, paper, match, ice, linseed-oil, pump, rope, envelope, rubber, dry-goods, land improvement, dock, steamship, marble, fuel, locomotives, woolen, fireworks, whiskey, biscuit, lead, salt, zinc, leather, pine, bank-note, flour, corn-products, and ferry companies. In the stock market there are dealings in other kinds of companies, including can, refrigerating, storage-battery, lead-reduction, securities, carriage, enameling, elevator, baking-powder, potteries, coke, writing-paper, thread, type, rubber-tire, electric-boat, signal, monotype, bread, stevedoring, realty, car-heating, coupler, and typewriter. Speculation companies have also been formed, and some time ago a corporation was organized by creditors to take over the business of an embarrassed merchant.

REFERENCES

- "American Corporations," John J. Sullivan, 1910.
- "Corporation Finance," Edward S. Meade, 1910.
- "Trust Finance," Edward S. Meade.
- Report of Railroad Securities Commission, H. R. Document No. 256, 1911.
- "Modern Business Corporations," W. A. Wood, 1906.
- "Corporation Finance," Francis L. Greene, 1901.
- "Rights of the Minority Stockholder," Richard L. Harvey, 1909.
- "Treatise on Stock and Stock-holders," Arthur L. Hellivell, 1903.
- "The Modern Corporation," Thomas Covyngton.

CHAPTER IX

LISTING OF SECURITIES

To "list" a stock is to have it admitted to the right of being dealt in on the Stock Exchange. No stock or bond can be bought or sold there which has not first been favorably passed upon by the Exchange authorities.

No Guarantee of Value.—The New York Stock Exchange does not guarantee the value of any security which it admits to the privileges of its floor. It neither recommends nor condemns. Each investor must decide for himself the value of the securities which he may seek to buy. The Exchange affords an open and continuous market, but makes no attempt to regulate either its prices, so as to make them conform strictly to intrinsic value, or the management of corporations whose stocks and bonds may be listed on its floor. But the Exchange has certain strict rules governing the admission of securities to its market, and investors may rely upon it that these rules are rigidly enforced. Whether the Exchange goes far enough in its regulations for the listing of securities is a question of some dispute, but as far as it goes, it is scrupulous in enforcement. Of course the Exchange can hardly assume to guarantee investors or to be the censor of corporate action. The expense and labor involved in making an efficient periodical examination in the affairs of all the corporations in the country would render any such duty a practical impossibility. Something must be left to the judgment of the individual. No system can entirely protect a fool from wasting his money. The investor must make up

his own mind as to the value of securities. The mere fact that they are listed upon the Stock Exchange should never be taken as a guaranty of their intrinsic value, nor could any system be devised which would bring about that result.

The Hughes Commission did not recommend that either the State or the Exchange should undertake to verify the statements of fact filed with applications for listing on the ground that any attempt to do so would give the securities a standing in the eyes of the public which would not in all cases be justified. It did, however, urge that the Exchange should compel the filing of frequent statements of financial condition, and a statement showing exactly for what capital stock has been issued, including commissions paid to promoters and vendors.

The position that has been taken by the authorities of the Exchange is that it is not the function of the Exchange to deny or confirm or criticise reports made by corporations, as it might, by such a course, serve to condemn or approve of the value of such securities. The question of value, as has been shown, must be left for each individual investor to decide for himself. While all statements for listing purposes are signed by responsible officers of applying corporations, it has not been found necessary to demand affidavits. An officer who would deliberately put his signature to a false statement could not be depended upon to swear truthfully to it. As to the question raised by the Hughes Commission that statements showing exactly for what capital stock has been issued including commissions, it has been argued by defenders of the Exchange that the cost of properties which may come together in big combinations can not be procured or estimated by the Exchange. Bankers' and promoters' commissions and profits are

generally paid in securities, and when cash is paid it is a matter of confidential agreement.

Publicity.—Publicity is the best protection which an investor can have, and the greater the publicity, the better it is for Wall Street. This publicity can be best provided for by the government through its laws, but the Exchanges and the corporations themselves can do much to promote it. There are some trade secrets which, of course, a business concern has a right to hold inviolate, but outside of these legitimate secrets, which are as valuable as a patent or a trade-mark, corporate business—and especially as to its finances—should be conducted as much as possible in the open.

Publicity was the first reform advocated by President Roosevelt, in his policy of governmental control over corporations, and it was not only the first, but the best; and if comprehensively applied would make other reforms almost unnecessary. "The first essential," said President Roosevelt, "in determining how to deal with the great industrial combination is knowledge of the facts—publicity."

The Railroad Securities Commission declared that enforced publicity is immediately needed. It said that stringent provisions regarding publicity of stock and bond issues, which will show how far the laws are obeyed, will be more salutary and more effective than any new statutory demands. The function of the government, it adds, is to see that correct information is available. But even the government is powerless to compel investors to act on this information.

Without passing upon the question whether the New York Stock Exchange has done all that it might do to establish comprehensive publicity in corporate organization, corporate finances, and corporate administration, this at least may be said: it has progressively strength-

ened its rules toward that ideal. It certainly has performed a valuable service to the community for many years by its regulations in regard to the listing of securities.

Safeguards Are Numerous.—The Exchange formerly divided its market into two departments, listed and unlisted, but the latter was in 1910 abolished to the great betterment of the Wall Street system. The rules that must be complied with in order to secure admission to the list are worthy of some study, for there is no other branch of Wall Street mechanism in regard to which there is more popular misconception than this. It is important for the investor to know what safeguards the Exchange throws around its market. It will be found that they are numerous.

The constitution of the Exchange provides that there shall be a committee on stock lists to consist of five members, to which shall be referred all applications for placing securities on the list. It is further provided that all securities placed upon the list must be with the consent of the Governing Committee, and only after report made by the Stock List Committee to the Governing Committee, "with a full statement of capital, number of shares, resources, etc." Thus a security to be admitted to the list must pass the scrutiny of two committees, one of them the supreme governing power of the Exchange.

The only exception to this rule is that the Stock List Committee has the power to place on the list, without report to the Governing Committee, any obligations of any national, state or city government, and also temporary receipts issued by any corporation or firm.

Listing Requirements.—The Stock List Committee has, under this constitutional provision, drawn up a definite statement of just what it requires of all applications to

list. It is provided in the case of a railroad company that there shall be filed a statement of the location and description of the property, and, when possible, also a map thereof. This statement should give the title of the company, when it was organized, and by what authority, the route of road, the miles of road completed and in operation, contemplated extensions, equipment, liabilities and assets, earnings, amount and description of mortgage lien or other indebtedness. Also a statement of, and liability for, any leases guaranteed, rentals or car trusts and terms of payment thereof. Also the number of shares of capital stock authorized and its par value, a list of officers and directors, the office of the company, the transfer office and registrar, together with their names.

In the case of bonds only issues upon completed mileage will be listed. The application must state the amount authorized, the date of issue and maturity, the names of trustees, the par value, the rate of interest, whether subject to earlier redemption by sinking-funds or otherwise, and whether convertible into other forms. A copy of the mortgage duly certified is required, and proof that the mortgage has been duly recorded is insisted upon. The application must be accompanied by a balance-sheet and statement of income account of recent date.

In the case of a reorganized company, the Exchange requires a complete financial statement for a period of at least one year prior to reorganization, the receipts and expenditures in detail, a balance-sheet, and a description of the new security issued. This requirement was first made in February, 1895, and materially strengthened the rules for listing. The Exchange recommends that a trust company should be appointed as a trustee of each mortgage or trust deed. When an in-

dustrial or manufacturing company applies for the listing of its securities, it must submit the opinion of counsel that it has been legally organized and its securities legally issued. If the company is the result of a consolidation—in other words, a trust—a statement must be submitted of the financial and physical condition of the constituent companies; a full description of the real, personal, and leased property; proof that real estate is free and clear except as to stated liens; a report of responsible expert accountants showing results of business each year for at least two consecutive years, if possible; a balance-sheet; statement of the powers of the directors under the charter; an agreement that the company will not dispose of its stated interest in the constituent companies except on direct authorization of stockholders; and that it will publish at least once in each year a properly detailed statement of its income and expenditures of the preceding year, and also a balance-sheet at the end of its last fiscal year. The Exchange requires that all active stocks must be registered at some satisfactory institution, and the registrar must state the amount of stock registered at the time of application.

Annual Reports.—Having made these and other requirements, the Stock List Committee for years made the following recommendation:

“The Exchange recommends to the various corporations whose securities are here dealt in, that they shall print, publish, and distribute to stockholders, at least fifteen days prior to annual meetings, a full report of their operations during the preceding fiscal year; together with complete and detailed statements of all income and expenditures, and a balance-sheet showing their financial condition at the close of the given period. The Exchange requests that stockholders of the several

corporations take such action as may be necessary for the accomplishment of this recommendation."

The Exchange now "requires" all corporations to do this; and this in itself is a notable contribution to publicity.

LISTINGS ON NEW YORK STOCK EXCHANGE

Bonds.	Issues for new Capital, &c.	Old Issues Now Listed	Replacing old Securities.	Total.
	\$	\$	\$	\$
1911	397,563,800	35,122,000	148,148,600	580,834,400
1910	571,526,800	52,008,300	181,627,400	805,162,500
1909	712,734,963	8,479,000	377,742,537	1,098,956,500
1908	648,869,500	95,794,000	128,294,500	872,958,000
1907	246,733,914	72,362,000	101,717,086	420,813,000
1906	<i>x</i> 303,112,000	12,304,500	256,482,000	<i>x</i> 571,898,500
1905	569,079,000	20,000,000	330,947,650	980,026,650
1904	429,810,500	.....	105,269,100	535,079,600
1903	<i>a</i> 191,515,050	12,798,000	376,975,750	581,288,800
1902	197,516,313	2,878,000	333,124,987	<i>a</i> 533,519,300
Stocks.				
1911	255,897,215	38,000,000	349,717,615	643,614,830
1910	304,681,590	467,175,700	467,644,255	1,239,501,545
1909	297,253,037	363,701,600	664,571,448	1,325,526,085
1908	123,977,900	248,780,200	141,169,350	513,927,450
1907	159,106,244	321,056,300	95,869,506	576,032,050
1906	237,479,600	16,440,700	408,849,150	662,769,450
1905	125,123,300	99,889,200	308,422,400	533,434,900
1904	120,635,050	.....	55,231,750	175,866,800
1903	172,944,200	38,791,600	215,154,495	426,890,295
1902	251,069,400	11,462,300	521,500,895	784,032,595

Note.—Applications for the listing of Trust Company receipts and of securities marked "assented" (if preparatory to reorganization), or of securities stamped "assumed" or "assessment paid"—the securities themselves having previously been listed—are not included in this table.

a, not including \$1,155,000,000 Imperial Russian State 4% certificates of rente.

x, excludes \$425,000,000 Japanese Government bonds.

The preceding table is a statement * of the listings of bonds and stocks by the New York Stock Exchange from 1902 to 1911 inclusive:

The total of issues for new capital in these years amounts to \$6,316,629,376.

* Compiled by "Commercial and Financial Chronicle."

CHAPTER X

THE NEW YORK STOCK EXCHANGE

It has been seen that with the progressive issue of new certificates representing ownership or indebtedness, either in the shape of national, state, and city bonds, or in the shape of stocks and bonds of banks, railroads and industrial companies, there has naturally developed a market for the buying and selling of these securities. Wherever this stock-market becomes of large extent it is necessary to establish a stock exchange for its proper regulation. Stock Exchanges now exist in every large city of Europe and America.

There are 14 Stock Exchanges in the United States and 11 additional in other parts of the Western Hemisphere. There are 10 in Great Britain and 21 additional in other parts of Europe, while in Asia and Africa there are 31. Thus 87 Stock Exchanges exist in the world. Of these, the Exchanges in London, New York and Paris are the most important.

Objects.—The New York Stock Exchange is an unincorporated association of 1,100 members, organized for the purpose of supplying a continuous and regulated market for the buying and selling of stocks and bonds. "Its objects," says the new constitution adopted in March, 1902, "shall be to furnish exchange rooms and other facilities for the convenient transaction of their business by its members as brokers; to maintain high standards of commercial honor and integrity among its members; and to promote and inculcate just and equitable principles of trade and business."

The management of the Exchange has tried to carry

these objects into effect. Whatever may be justly said of the stock-market, no serious criticism of the good faith of the Exchange can be made. Its sins are those of omission rather than commission. It may at times move too slowly in making changes, but it moves. It insists upon honorable dealings between its members and between its members and their customers. A member guilty of fraud is expelled. A member unable to fulfill his contracts is suspended. The Exchange enforces strictly its elaborate laws for the listing of securities and for the sale and delivery of stocks.

Its Proper Jurisdiction.—Those who hold that it should do much more than it does should remember that there is a limit to its powers and responsibilities. John R. Dos Passos, who is an acknowledged authority on the law of Wall Street, holds that it seems entirely reasonable “to confine and limit the jurisdiction of the Stock Exchange to those matters which arise between its members in the course of their business with each other as brokers; otherwise its judicial powers might be extended to embrace every affair of human life, which was never intended, and which the law would not permit.”

Membership.—In 1869, after the consolidation of the Stock Exchange, the Open Board of Brokers, and the Government Bond Department, the membership of the united body was 1,060, but ten years later, 40 additional memberships were created and sold to defray the cost of an enlargement of the Board-Room. Since then there has been no increase in membership, and the constitution provides that there shall be no increase except by the action of the Governing Committee subject to approval by a majority of the members.

While located in New York, the Exchange is actually a national institution. There are stock exchanges in

other cities, but these are local institutions, and their markets restricted for the most part to dealings in local stocks. But the New York Stock Exchange deals in the securities of the entire nation, and its membership represents many different parts of the country. There were, in 1911, 104 out-of-town members, including 32 of Philadelphia, 17 of Chicago, and 20 of Boston. St. Louis, Baltimore, Buffalo, Rochester, Kansas City, Richmond, Washington, San Francisco, Pittsburgh, Minneapolis, Cincinnati, New Orleans, and other cities are represented in the membership.

Many of the members maintain branch offices. These numbered 505, most of them being in New York City itself, but a great number scattered among 50 different cities and towns in the United States and Canada, as well as in London, Paris, Berlin and Hamburg. There is a branch house as far West as Denver, and another as far North as Toronto. Three firms maintain as many as eleven branch offices.

The 1,100 members of the Exchange represent 583 firms, in which there are 2,006 partners. Usually a firm is content to have only one partner in the Exchange, but there are many which have two or three and there is one firm of ten partners, eight of whom are members of the Board.

It does not follow that because there are 1,100 members they are all brokers. As a matter of fact, only a part of them are. Among the members are such great capitalists as John D. Rockefeller, William Rockefeller, George J. Gould, Edwin Gould, Frank J. Gould, Howard Gould, August Belmont and Edwin Hawley,* men who never execute an order on the floor, and who rarely, if ever, are seen there. These men employ brokers. They are principals. Membership in the Exchange gives them

* Deceased.

the advantage of a lower rate of commission than they could command as outsiders.

Their memberships represent to each of them in interest on market price of seats and annual dues an expenditure of \$3,250 a year more or less as the price of seats advances or declines; but they are able to save more than that in commissions. There are others who were formerly active brokers, but who now have joined the class of principals. There are other members, heads of large banking or commission houses, who are seldom seen on the floor, but intrust the interests of their firms there to junior partners. Moreover, many of the most prominent men in the Street are not members of the Exchange. J. Pierpont Morgan is not a member, but his son of the same name is. Although James R. Keene was for years one of the noted stock operators in the Street, he is not a member.

Two-Dollar Brokers.—It is estimated that the members and their employés form an army of at least 15,000 workers. There are many members who maintain no offices of their own but clear their business through other members. There are a number of houses which confine their business to clearing for this class of members. Then there are other members who serve as brokers for brokers. They constitute the large class, estimated to number 250, of what are called "two-dollar brokers"—that is to say, they execute orders for other brokers at the low but legal rate of \$2 per 100 shares. The same business would cost an outsider \$12.50.

Room Traders.—There is another class of members who are known as "Room Traders." These do not execute orders for others, but buy and sell for their own account alone. Most brokers speculate for their own account to some extent, although many make it a rule to confine themselves to a

strict commission business. But Room Traders are professional speculators, who act at the same time as principals and agents—that is to say, they execute their own orders. There are between 50 and 100 of these Room Traders who enjoy the privilege of being all the time on the floor of the Board-Room, and thus able to take advantage at once of every opening. They know the prices even before they are recorded on the tape, and they are able to join in every upward movement the moment it begins, and to abandon it the moment it shows signs of wavering. They are in and out of the market perhaps a dozen times a day. They constitute an important element in it.

Specialists.—There is still another class of members. They are “Specialists”—that is, brokers who make a specialty of one or two or three securities alone, these securities being usually of the investment class, requiring close and expert attention. The business of these specialists is also largely with other brokers. It will thus be seen that the number of brokers who act directly as agents for outside traders forms less than one-half of the Stock Exchange membership. The average attendance on the floor of the Exchange is between 500 and 600.

Membership in the Exchange being limited to 1,100, admission is obtainable only when there is a vacancy. Membership is secured through purchase of the “seat” of a deceased or insolvent member, or of some one who desires to retire from business. The application is passed upon by a Committee on Admissions composed of 15 members. This committee has full power of election, but there must be 10 affirmative votes. The applicant must be of legal age and a citizen. He must pay an initiation fee of \$1,000 in addition to the cost of his seat. No certificate or other evidence of membership is issued.

“Seats”—The word “seat” as applied to a membership is an inheritance of the old days when the brokers had individual seats in the Board-Room, like Senators in a Senate chamber. There are no such seats now in the Board-Room, and very few chairs of any kind. The brokers are too busy to sit down. Every member has the right to transfer his membership subject to the approval of the Committee on Memberships. With that approval he may sell it. If he dies, the committee sells it and pays the proceeds to his heirs after payment of any outstanding claims of the Exchange or of the members thereof. If he fails, the seat is sold for the benefit of his creditors, but members of the Exchange having claims upon him have a first lien upon it.

Membership in the Exchange is an asset of large value. The price of seats varies, like the price of stocks, although not so volatile. The price is, however, a fair indication of the activity of the stock-market in any given year. There are a few old members, who joined forty or forty-five years ago, who paid only \$500 for their seats. In 1871 seats were sold as low as \$2,750. In the boom year of 1882 the price reached \$32,500. Two years later, in the panic, the price fell to \$20,000. The next year, however, it reached \$34,000, and this remained the highest price for many years. In the panic of 1893 memberships were quoted at \$15,250, and in 1896 as low as \$13,000. Thereafter there was a rapid advance, until in the last week of 1901 sales were made at \$80,000. At this price the total value of Stock Exchange seats amounted to \$88,000,000. In 1902 the price fell to \$60,000, and later advanced to \$70,000. In 1909 seats sold as high as \$96,000, with an aggregate value of \$105,600,000. In 1911 they sold down to \$65,000. To the price of the seat must be added the initiation fee. The number of membership transfers varies

from 40 to 100 a year. One reason for the advance in price in the last few years, apart from the great growth in business, is the demand from out-of-town brokers seeking entrance in the Exchange, and the demand from rich men in behalf of their sons, whom they wish to set up in a genteel business.

Something more than wealth, however, is required in the applicant. He must be of good business reputation, and must have no alliances that would bring discredit on the Exchange. To a member who formed a partnership with a man guilty of dishonorable practices on Black Friday was given several years ago the alternative of giving up the partnership or his seat in the Exchange. He gave up the partnership. A member who fails must immediately inform the president, and is suspended until such time as he is able to make a satisfactory settlement with his creditors.

Then to secure reinstatement he must be balloted for under the same conditions as apply to a new applicant, except that if six successive ballots are unfavorable to him he has the right of appeal to the Governing Committee. The insolvent member, however, must settle with his creditors within one year, or his seat will be sold, though the Governing Committee may extend the time. If the applicant for membership or for reinstatement in order to secure favorable action makes a misstatement upon a material point, he will be subject to expulsion. If his failure has been caused by reckless or unbusinesslike trading, he may be declared ineligible for reinstatement.

Expulsions.—A two-thirds vote is required to expel a member found guilty of fraud. Prior to 1865 the Exchange expelled three members for fraud—one for deceiving a customer as to the price of a stock, another for forgery, and a third for issuing a worthless check.

From 1874 to 1902 there were nine expulsions—three in 1896 for “bucket-shopping” the orders of customers (a term that will be explained in another place), and the others for various forms of fraud. The most famous of the expulsions was that of Hutchison, John R. Duff’s broker in the Hannibal and St. Joseph corner. Hutchison appealed to the courts, which decided that the Exchange had the right to expel him, but could not appropriate the value of his membership. Up to that time the laws of the Exchange provided that the seat of an expelled member escheated to the Exchange.

Any member directly or by partner connected with any organization in New York city dealing in securities similar to those listed in the Exchange is liable to expulsion. The Governing Committee is very strict in enforcing this law. It has by resolution prohibited any connection, direct or indirect, between its members with the Consolidated Stock Exchange, as being detrimental to the interests of the New York Stock Exchange. Every member in New York is required to have a place of business where notices may be received. No member can represent more than one firm. Branch offices must be in charge either of resident partners or of salaried employés.

Commissions.—The Exchange maintains its rates of commissions rigidly. The commissions are always based on the par value of the securities traded in. No rebates or discounts of any kind are allowed. The constitution provides that on business for parties not members of the Exchange, including joint account transactions in which a non-member is interested, transactions for partners not members of the Exchange, and for firms of which the Exchange member or members are special partners only, the commission shall be not less than $\frac{1}{8}$ of 1 per cent. This, as has been stated, amounts to \$12.50

on 100 shares, but as every purchase except for permanent investment is followed by a sale, the commission on one transaction both ways amounts to \$25. On every purchase and sale, therefore, there must be an advance of at least $\frac{1}{4}$ of 1 per cent. to pay the commission.* Anything over that is profit, except that an allowance must also be made for interest.

Business is done by members for members who do not give up the name of a principal at $\frac{1}{32}$ of 1 per cent., and for members giving up a principal at $\frac{1}{50}$ of 1 per cent. A firm having one of its general partners as a member of the Exchange is entitled to these reduced commissions. Violation of the commission law is punishable by suspension from one to five years, but a second offense means immediate expulsion. A member can not form a partnership with a suspended member or with any insolvent person.

The Opening.—The Exchange is opened every business day at half-past nine, but no business can be transacted until ten o'clock, when the Chairman, who occupies a seat upon the rostrum, announces the opening. It is the duty of the Chairman to open and close the Exchange, preserve order, and make all announcements, such as deaths, insolvencies, etc. He also buys and sells stock "under the rule"—that is, when a member is unable to make good deliveries, stocks are bought or sold for his account by the Chairman. There are five hours of trading. The Exchange closes promptly at three. Only loans can be made after that hour. A fine of \$50 is imposed on a member who makes any transaction in stocks or bonds, listed or quoted in the Exchange, after

* By resolution of April 13, 1910, rates of commission on mining shares are based upon selling price regardless of par value, and are fixed for non-members at \$12.50 per 100 shares when selling at \$10 and above per share, or at \$6.25 when selling below \$10.

that hour or before 10 A. M. in the Exchange or publicly outside.

As soon as the sound of the Chairman's gavel is heard at the opening a babel of voices is raised. The opening is usually active, as orders accumulate over night. To the onlooker in the gallery everything is apparently noise and confusion. Here is business, he would say, without any system. If he did not know that he was in the Exchange, he might suppose that by accident he had entered a lunatic asylum. He sees men rush wildly into a group with violent gestures and raised voices, push and struggle and shout, all apparently to no purpose. But now and then he will observe someone to leave the group and quietly make a memorandum on a pad. In all that babel of voices and mass of struggling men, comparable only to the crush on the Brooklyn Bridge in the rush hours, a sale has been made involving thousands of dollars.

The Stock Exchange was for years one of the show places of New York. Tourists were always taken there, and the galleries were crowded, especially on days of excitement, when the scenes on the floor were of extraordinary interest. In the present Exchange building there is a gallery, but admission is denied except to those specially introduced by members. The authorities of the Exchange do not think it safe, or otherwise desirable, that there should be a crowd of unidentified strangers in the gallery in times of excitement or panic.

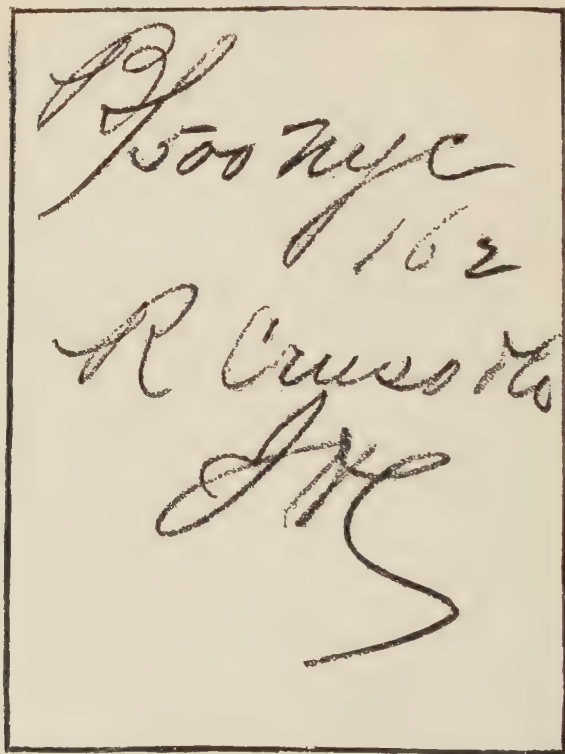
Method of Trading.—But while superficially all is confusion worse confounded in the Board-Room, as a matter of fact no system could be more simple or effective, and all trading is done under strict rules rigidly enforced. In every part of the room are posts bearing placards on which are printed the names of stocks. Every active security has its own place for dealings.

Thus, there is a Sugar post, a Reading post, and the like. There is a place for borrowing stock, and another for loaning money. There are some posts where several stocks are traded in. Brokers having orders to buy Sugar go to the Sugar post, and cry out how much they want and the price they will pay, much as one would bid for real estate at an auction-room, except that here there is no auctioneer.

Bids and Offers.—One broker bids, say, 116 for Sugar. There is another broker who has an order to sell at 116 $\frac{1}{4}$, or there may be a dozen offers or a dozen bids at the same time. The first bid or offer, however, when it can be distinguished, takes the precedence. If there are more offers than bids the market is weak and the price declines. If the demand is greater than the supply, the price goes up. Prices are made by eighths of 1 per cent.; the fractions used are $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{2}$, etc.; there are no thirds or sevenths. No seller offers a stock down at more than $\frac{1}{8}$ of a point at a time. For instance, if his offer of 100 brings no buyer, his next offer is always 99 $\frac{7}{8}$. Each post has an indicator giving the last quotation made. It is necessary that the broker should be active, strong of physique and of voice, quick to see, and prompt to act. No other occupation requires more alertness of mind, coupled with more strength of body and tension of nerve, than that of the broker of the Stock Exchange. All business is done by word of mouth. There are no written contracts. A mere word "sold" or "taken" closes a transaction that may involve \$10,000, or even \$1,000,000. As he buys or sells, the broker records on a little pad, at the earliest opportunity, the name of the broker of whom he has bought or to whom he has sold.

The Pads.—These pads are supplied to the members of the Exchange and are of uniform size. The accompanying cut shows the size of one of these pads, and it is

of interest as showing in how small a space a large transaction may be recorded:



THE BROKER'S PAD

In this case, the broker has bought 500 shares of New York Central at 162, the total involved being \$81,000. He simply recorded the name of the seller, the amount, the price, and his own initials. Later, as will be explained, there are comparisons made between buyers and sellers.

Here, then, is a market, or combination of markets,

in which, strictly speaking, there is no actual exchange of securities. That comes later. No stock or bond is ever transferred in the Board-Room. All that takes place there is an oral contract to sell or buy, to deliver or receive, a certain number of stocks or bonds at a certain time outside of the Exchange. These oral contracts to deliver are generally called "sales," but sometimes "transactions."

Privileges of the Floor.—No one is allowed on the floor except members and uniformed employés of the Exchange. When a member is wanted at the door or at the railing which surrounds the Board-Room, his name is given to an employé, who, by means of an electric annunciator, uncovers a number which is assigned to each member. This number is painted on a rectangle of opaque glass about 9 by 12 inches in size. Behind the glass are electric lights of different colors. If a number is wanted at the telephone, a light of one color is shown, or if he is wanted at the entrance, a light of another color will flash.

Most of the orders are conveyed to the floor by telephones, of which there are several hundred around the Board-Room. These telephones are leased by the individual members, and connect with their offices. Millions of dollars' worth of property are bought or sold every day through the agency of these telephones.

The Active Broker.—Between the telephone, the annunciator, and the execution of his orders in the various groups, the active broker, in his few hours on the Exchange, works harder than most people do in twice the time. He is under a severe nervous strain. He labors in an atmosphere of excitement, suppressed for the most part, but at times belching forth in volcanic fury. Besides executing his orders, he is supposed to keep a watch on what is going on in all parts of the room, and

to report to his office all rumors that are circulated and all evidences he discovers of manipulation and other influences at work. He must know what other brokers or traders are selling or buying, and whom they are supposed to represent. He must form a quick judgment as to the forces which are at work in the market and as to the probable rise or fall of prices.

No wonder the active Board member is usually a young man. The elder members of the firm remain in the office directing its affairs and advising customers. The juniors have to enter the arena of speculation to grapple with the gladiators of the Board-Room. In a time of special excitement this is no mere figure of speech, because the broker is obliged to use physical force to push himself into the group of buyers and sellers, and to hold his own and to make himself heard against all comers.

Few Disputes.—The constitution of the Exchange provides that all offers made and accepted shall be binding, and it is creditable to the members that the large transactions, made as they are orally, are honorably fulfilled, and comparatively few disputes arise as to the terms of any contract. In all offers to buy or sell, the offer must be accompanied with some specific number of shares, and when no amount is named it is considered, under the constitution to be for 100 shares of stock of the par value of \$100 each, or for \$10,000 of bonds. As a matter of fact, the bulk of the transactions is in \$10,000 blocks.

Cash and Regular.—It is specified that bids and offers may be made only as follows: "Cash," that is, for delivery and payment upon the day of sale; "regular," which is for delivery upon the business day following the day of sale; "at three days," that is, for delivery upon the third day following the making of the con-

tract; "buyer's or seller's options" for not less than four days nor more than sixty days.

Options.—These options mean that the buyer has the right to demand the delivery, or the seller has the right to deliver, at any time within the period of the option. This is a device which, in a measure, corresponds to the system of options or "futures" in grain and cotton speculations, in which the products are sold to be delivered in some future month. The chief difference is that grain and cotton options are for months, not days, and one may buy grain or cotton in March to be delivered, it may be, the following December.

In the Stock Exchange on transactions for more than three days written contracts are exchanged on the day following the transaction, and carry interest at the legal rate. On such contracts one day's notice must be given, at or before 2.15 P. M., before the securities shall be deliverable prior to the maturity of the contract. Bids and offers of cash, regular, at three days, and buyer's or seller's options may be made simultaneously, as being essentially different propositions. In offers to buy on seller's option or to sell on buyer's option the longest option has precedence. In offers to buy on buyer's option or sell on seller's option the shortest option has precedence. No other bids or offers have any standing on the floor. No sale is permitted on which a deposit shall be offered as to limit of liability. Brokers carry stocks for their customers on margins, but between themselves all transactions are on the basis of full payment on delivery.*

"Wash Sales" Prohibited.—No fictitious transactions are permitted on the floor under penalty of suspension for not more than one year. The common Street name

* New rules covering bids and offers adopted March 30, 1910 (amended May 12, 1911), will be found in full on page 392 *et seq.*

for fictitious sales is "wash sales." When two brokers conspire together to make a pretended sale of a stock in order to give it a fictitious quotation, that is "a wash sale." It is practicable, however, for an outside operator, by using different brokers, some to sell and others to buy, by a process of "matched orders," as they are called, to give a fictitious value to a stock. This is, indeed, a common manipulative device, and has at times been carried to such extremes as to constitute very plain cases of fraud. While the brokers may be innocent tools of such a conspiracy, it has been argued that the Exchange might by some extension of its rules be able to reach the real conspirators, and in some way to prevent the evil. The Exchange aims at making every sale represent a genuine transaction.

The constitution provides that no offers to buy or sell privileges to receive or deliver securities shall be made publicly at the Exchange under a penalty of \$25 for each offense. By "privileges" are meant "puts," "calls," and "spreads," Wall Street terms for a system of bets on the future prices of stocks, and betting is not permitted on the Exchange. Privileges, however, may be dealt in outside the Board-Room, in which case members dealing in them for non-members must charge the regular commission of $\frac{1}{8}$ of 1 per cent.

Comparisons.—When the broker has bought or sold in the Exchange, he reports the transaction by telephone to his office, and not later than an hour after the close of the Exchange the seller is obliged to compare, or endeavor to compare, the transaction at the office of the buyer. Formerly comparisons were made verbally, but in 1891, a new system was introduced, and now slips or tickets are exchanged. No comparison or failure to compare, and no notification or acceptance of notification, shall have the effect of creating or cancel-

ing a contract or changing its terms. If the stocks are to be cleared, the transaction passes through a system described in another chapter.

Deliveries.—Deliveries of securities must be made before 2.15 P. M. on the same day, if sold for cash, or on the following day, if sold regular. The vast majority of sales are regular. If there is no delivery before 2.15 the contract may be closed out "under the rule." In this case immediate notice must be sent to the Chairman, who will read it from the rostrum, and will publicly buy in the stock at the best price that can be obtained. If this price is more than that at which the stock should have been delivered, the buyer has a claim against the seller for the difference. The same rule applies to borrowed and loaned securities. If no notice of failure to deliver is given, the contract continues without interest until the next day. When the transfer-books of any company are closed by a legal impediment, deliveries of stocks on contract are made by irrevocable power of attorney, the papers to be satisfactory to the recipient or passed upon by the Committee on Securities.

Assignments.—Definite rules have been established by the Exchange to govern the form of assignment and powers of attorney which must be acknowledged before a notary public. Every stock certificate carries on its face the name of the person to whom it is issued and the number of shares he owns. If the holder sells the stock, it is transferred on the books of the company from the name of the former owner to that of the new, and a new certificate is issued to the latter, but it can also be transferred by an assignment on the back of the certificate. Ultimately the buyer will have the stock transferred to his own name, but in the meantime he has complete evidence of his ownership. It is prescribed by the rules of the Exchange that the signature to the assignment must

be technically correct—that is, it must correspond in every respect with the name as written on the face of the certificate. Even such prefixes and affixes as Judge, Doctor, Rev., or M. D. or LL. D. must appear in the indorsement. Certificates in the name of a married woman are not a good delivery while the transfer-books are open; when the books are closed a joint execution of the assignment by both the husband and wife before a notary public is required. An indorsement by a firm represented in the Exchange on a certificate is considered a guarantee of the correctness of the signature of the person in whose name the stock stands. In the delivery of stock, the receiver has the option of receiving by certificate and powers of attorney irrevocable in the name of and guaranteed by a member of or firm represented in the Exchange, or by transfer thereof; but in all cases where personal liability attaches to ownership, the seller has the right to deliver by actual transfer on the books of the company. The receiver may, in all cases, require delivery by transfer when there is time to make it and the books are open. Certificates in the name of an institution or in the name of one of its officers with title affixed are not a good delivery unless assignment is acknowledged before a notary. Some companies—as, for instance, the Western Union Telegraph and the American Sugar Refineries—require, in addition, a certified copy of the resolutions of the directors of the company in whose name the stock stands.

Dividends.—Deliveries should be made in lots of 100 shares or multiples thereof, and in the case of bonds in lots of \$10,000 or multiples thereof. Dividends on stocks are paid, of course, only to the person to whom certificates have been issued and whose names appear on the books. As soon as the books are closed all transactions in the stocks are “ex-dividend.” The buyer

does not receive the dividend, as his name can not be entered on the books after they have been closed. The constitution of the Exchange provides that the buyer is entitled to receive all interests, dividends, rights and privileges, except voting power, which may pertain to the securities contracted for, and for which the transfer-books shall be closed during the pendency of the contract, and the seller is obliged to deliver to him a due bill therefor signed or indorsed by him. But when a stock is sold, *ex-dividend*, it is sold with the dividend off. The *ex-dividend* quotation of a stock is generally the last previous price less the amount of the dividend. For instance, if the price had been 130, and the books closed for a dividend of $1\frac{1}{2}$, the next quotation would be 128 $\frac{1}{2}$. The constitution prohibits, under penalty for violation, all offers to buy or sell dividends publicly at the Exchange. This, however, is done frequently in Wall Street. It is in the nature of a bet on the amount of the coming dividend. For instance, there may be much discussion whether the American Sugar Refineries Company's next quarterly dividend will be $1\frac{3}{4}$ per cent. or 2 per cent. A bull on the stock believes that the dividend will be increased, so he offers $1\frac{1}{4}$ for the next dividend. If the company declares 2 per cent., he makes the difference of $\frac{1}{8}$ per cent.; but if the old rate is declared, he loses what he has paid in excess of the amount declared.

Short Sales.—As has been said, there is a place in the Exchange where stocks may be loaned and borrowed. The outsider is often puzzled by this class of transactions. Why, he may ask, does any one desire to borrow stocks? He borrows in order to make deliveries. He is under contract to deliver, say, 100 shares of Rock Island. He does not own the stock and so he borrows it. But why should he sell something that he does not own?

This question opens up the phenomena of "short" sales. It has already been explained that a bear is short when he has sold stock that he does not own, but hopes to be able to buy on a declining market. He believes, to put a suppositional case, that the stock of the "Trans-Continental" Company is selling too high. It is paying 5 per cent. a year, but is quoted at 172 on reports that there will be an increase to 6 per cent. The bear has information, or thinks he has information, that the directors will maintain the old rate, so he begins to sell the stock. But as he does not own a share, and as deliveries must be made the day following the sale, his broker borrows the stock for him. There are usually many lenders, for it is cheaper to lend the stock than to carry it as collateral for a loan at a bank. The lender of a stock receives its full market value in cash. His advantage is that he can thus receive a larger sum on the stock at a lower rate of interest than he could by borrowing money on it at the bank, and at the same time he has the right to demand return of the stock on repayment of the sum given for it. Loans of stock thus appear on their face the same as sales, and are subject to the same rules of delivery and clearance. The bear who is short thus makes delivery of the stock that he has sold with stock that he has borrowed. Taking up again the thread of the suppositional case, let it be understood that the bear's information is correct. The old rate of dividend is declared and the price of the stock declines to 165. Then the operator orders the broker to buy the stock in for him. This is accomplished, the loan is then satisfied by the delivery to the lender of the stock bought, and the operator has made \$7 a share, less commissions and interest.

As a rule, only professional or semi-professional speculators operate on the short side. Outsiders almost al-

ways trade on the long side. Indeed, the majority of people are by temperament bulls. Wall Street is distinguished from most other markets for the facilities it affords for selling what one does not possess. Short selling has been subject to much criticism in that its effect is to depreciate the market value of property. It is described as an assault on values. If A owns 200 shares of stocks valued at \$20,000, and B offers to sell the same at \$19,000, he has depreciated the value of A's property by \$1,000. It may be said that the intrinsic value is unchanged. But if A seeks to borrow money on his stock, the bank will assess its value as collateral on the basis of the price at which B offers to sell, and not on what A considers it to be worth. Nevertheless, it must be confessed that it is difficult to distinguish any real difference in the nature of transactions on the long and the short side. If it is right to speculate for a rise, it is right to speculate for a fall. The bear has his place in the market. He sometimes performs a useful office in restoring prices to their proper level. Like the minority in Congress, which serves as a check on the majority, the bear constitutes a check on undue inflation of prices. The subject of short selling is treated at greater length in other chapters.

In the rules of the Exchange loans of stocks, which are a part of the machinery of short selling, are treated as regular sales. It is provided that notice for the return of securities must be given at or before one o'clock.

The Exchange maintains a Bond Department, with places on the main floor for bond dealings, and the transactions not infrequently exceed \$5,000,000 a day, and have reached much greater sums. But the outside sales of bonds, "over the counter," as the Street phrase is, are larger, and call for the services of a distinct class of brokers expert in investment securities.

Insolvencies.—The business of a stock-broker is profitable, but extra-hazardous. One day of panic like that of May 9, 1901, may wipe out the profits of months of active trade. Indeed, at one time on that day it is believed that a majority of the brokerage houses were practically insolvent, and but for the speedy relief and rally many would have gone under. Nevertheless, from 1870 to 1902 there were only 631 Stock Exchange failures, an average of 20 a year during that period, and since then the average of failures has declined owing to the greater stability of business. In the panic of 1907 there were few Stock Exchange failures as compared with the record of the panic of 1873, when there were 79. In 1893 there were 13 insolvencies. The improvement in the mechanism of the Exchange, particularly by the establishment of the Stock Clearing-House, has greatly reduced the risks of the brokerage business.

The Exchange has a Committee on Insolvencies, consisting of three members of the Committee on Admissions, whose duty it is to investigate every case of insolvency immediately after its announcement; and should it ascertain that the failure is caused by reckless or unbusiness-like dealings, it reports the same to the Committee on Admissions, and the member may be declared ineligible for reinstatement, even if he should settle with his creditors. There have been a number of cases in which reinstatement has been refused for this reason. A member in applying for reinstatement is obliged to give a list of his creditors, a statement of the amounts of the original liabilities, and the nature of settlement in each case. When a member fails, his outstanding contracts are fulfilled by buying in or selling out under the rule of the Exchange.

Holidays.—The Exchange is closed on Sundays and all holidays, and it often voluntarily closes its doors on

Good Friday and on such special occasions as the funeral of the President of the United States or the celebration of a national event. Business on Saturdays ends at noon. All contracts due on Sundays and other holidays are settled on the preceding day. On Saturday all contracts in the regular way, and loans of stocks and money made Friday, are settled on Monday, and other contracts and loans of stocks and money falling due on Saturday are settled the day previous.

Governing Committee.—The government of the Exchange is vested in the Governing Committee, consisting of a President and Treasurer, elected annually, and of 40 members chosen for terms of four years. They are divided in classes, so that 10 are elected every year. This committee has supreme authority. Its decision on all matters is final. Before the consolidation in 1869, every matter of business was put to a vote of the members of the Exchange, but the present system has worked far better. It is substantially the same as that of the directors of a corporation. The governors are divided into a number of subcommittees, which have supervision over the different parts of the machinery of the Exchange. There are committees on arrangements, admissions, arbitration, commissions, constitution, finance, law, securities, stock list, and the Clearing-House. Governors are paid a small directors' fee for every meeting they attend, but the service they perform is really one of love. Men who could command high salaries as officers of corporations practically give their abilities and a large share of their time to the proper administration of the affairs of the institution. The Arbitration Committee settles without resort to litigation differences between members, and also between members and non-members when the latter will agree to abide by the result.

To be President of the Exchange is considered a high

distinction. Since 1817 over forty men have held the office, among the more noted being John Ward, H. G. Stebbins, Charles R. Marvin, W. R. Vermilye, William Alexander Smith, Edward King, Brayton Ives, Donald Mackay, J. Edward Simmons, Francis L. Eames, Rudolph Keppler, and Ransom H. Thomas, who holds the record for length of service. There have been only seven secretaries in eighty-five years. The Exchange has also a Chairman whose duties have been explained. This official receives a salary; he is a member of the Exchange, but not of the Governing Committee.

The Exchange Building.—The new building of the Stock Exchange stands in Broad, New, and Wall Streets, on the site of the old building and that of adjoining property bought so as to increase the size of the Board-Room, and provide other facilities for an enlarged business. The building, constructed of a high grade of Georgia marble, and distinguished by rows of fine Corinthian columns, is admirable in exterior architecture and interior conveniences. The Board-Room is a superb apartment, 138 feet long by 112 feet wide, and has a height of 80 feet. It extends from Broad Street to New, and contains many novelties for lighting, heating, ventilation, and the transaction of business. It is claimed for it that this is the most complete Stock Exchange in the world, a veritable palace of investment and speculation.

In the basement are built great steel vaults containing hundreds of safe deposit boxes or safes for the security of stocks and bonds held by the members. It is one of the picturesque sights of Broad and Wall Streets after 3 o'clock to see the brokers carrying their securities to these vaults. First will come two clerks carrying a box containing the valuable papers. Then follows closely a member of the firm who keeps an eye on the box and deposits it in his safe. Millions upon millions

of dollars' worth of securities are thus carried through the streets of the financial district every business day.

Comparison with London System.—It is but natural to inquire how the mechanism of the New York Stock Exchange compares with that of the London Exchange. There is really no comparison; there is a contrast.* In everything except international scope of operations, the New York Exchange has the advantage. To Americans the London system seems antiquated and clumsy, but Mr. F. W. Hirst tells us that the London division of functions into jobbers and brokers makes for a free market and close prices, and he claims that there is no other place in the world where good stocks are more easily and quickly realized at a minimum of loss or purchasable, so near the market price, as on the London Stock Exchange.

In London, there are clearances, but they are made every two weeks, not daily as in New York. Stocks are admitted to dealings, but under different scrutiny and regulations than prevail in New York. Then, in London, there is a dual system of jobbers and brokers, that seems incomprehensible to Americans accustomed to direct dealings between principals and agents. As in the administration of English law courts, there are distinct classes of counselors and attorneys, so in the London Stock Exchange, there are brokers who represent customers, but who must do all their trading through jobbers, who have no dealings with the public, but trade among themselves and with brokers. The jobbers are

* "As the eagerness and passion of New York leave European stock-markets far behind, for what the Paris and London Exchanges are at rare moments, Wall Street is for weeks, or perhaps, with a few intermissions, for months together, so the operations of Wall Street are vaster, more boldly conceived, executed with a steadier precision than those of European speculators."

JAMES BRYCE in "American Commonwealth."

the wholesalers, and the brokers the retailers. In New York, a customer may give his order in a broker's office and have it executed in the Exchange possibly in two or three minutes, and the record of it reported on the tape a minute later; but business in London goes through a system of circumlocution and delay quite characteristic of English conservatism and antagonism to haste. No record of sales is made, and while there are stock "tickers," there was much opposition to their introduction, and even now they record only prices, and not sales.

The London Exchange in 1910 contained 5,019 members, besides a great number of clerks. The latter serve four years of apprenticeship, when they may become members on payment of an entrance fee of 250 guineas. Others than clerks may join on a payment of double that amount. Members are re-elected every year. The Exchange is governed by a dual system of administration, very different from that of New York. It is controlled by a stock company commonly called the "House," having £240,000 capital divided into 20,000 shares. Only members can be permanent holders of the stock, and every member must own at least one share. Nine managers, elected by the shareholders, appoint most of the officers of the Exchange and fix the charges for admission of new members. The new members of the Exchange are represented by a committee of three which administers the rules, adjudicates complaints and maintains the inviolability of contracts.

Arbitrage.—Since the introduction of the cable there have been opportunities for what are called "arbitrage" dealings between the New York and London stock-markets. Instantaneous quotations are exchanged between New York and London, but as there is generally a difference in the prices, an active broker may, through his representative abroad, be able to buy in one market and

sell in another at the same time and clear a profit. In an arbitrage transaction, the ocean has to be crossed twice by a cablegram passing through the hands of three operators, but this takes only about four minutes, and has been done in less time. The difference in time between London and New York is four minutes and one second less than five hours. As the New York Exchange opens at 10 A. M., it is then four minutes of three o'clock in the afternoon in London, and by two minutes after three the full New York opening prices are known in London, only the six minutes being required to make the sales in New York, to gather the quotations, to put them into the hands of the telegraph operator, to transmit them to London and to publish them there.

The hour of closing business in the London Exchange is at three o'clock, but the trading goes on until four and on the curb much later. The London two o'clock quotations are received in Wall Street shortly after 9 A. M. London can trade by cable in American stocks during all the time the New York Exchange is open, as when it closes it is only eight o'clock in London. The London orders executed in New York are often large. They have amounted to as many as 100,000 shares and over in one day, and they are sometimes an important factor in the market. There was formerly a large arbitrage business between New York and other American cities, but this has been reduced to a small figure by the act, in 1898, of the New York Exchange, which, believing that this trading as carried on was detrimental to its interests because it resulted in practically ignoring the commission law, took measures to stop it.

Dissemination of News.—Experts say that it takes an item of unexpected outside news about fifteen to thirty minutes to make itself felt in the New York Stock Exchange, and it takes about as short a time for news origi-

nating on the floor of the Exchange to reach the "tickers" outside.

"How's London?"—The following is abridged from an excellent statement by W. P. Hamilton of *The Wall Street Journal* of the way London quotations are received in New York:

The first question anybody puts to anybody else, on arrival at his Wall Street office at 9:30 or so in the morning, is, "How's London?" The London quotations are the first real lead on our market. They to some extent indicate what will be the popular view of the news which has developed over night. There are times when the London view is immaterial. It is even often entirely at variance with that taken in this market. But when stocks are really active it is always important, and the London quotations are indispensable to any forecast of our day's trading.

A few minutes before 2 P. M., London time, the quotations for American stocks in the London market are obtained for transmission to New York. It takes, perhaps, eight minutes to collect these prices and transmit them in code form. The presses in New York are waiting. The code is rapidly translated. The equivalent is calculated at the ruling rate of demand sterling, and in twenty minutes from the receipt of the cable the quotations are being read in the brokers' offices.

London deals in American stocks at a fixed rate of \$5 for the pound sterling. The reason for this is that the rate of exchange is constantly changing. If the real quotation were taken for transactions there would be a continual dispute as to what the rate was at the time the bargain was made. A fixed figure makes no difference to the trader in London who buys and sells at the same conventional rate. We, however, cannot afford to give more than the rate of exchange for the sovereign.

Therefore, to get the difference between the London price and what the price of the stock would actually be here, we deduct the rate of exchange, say, $\$4.87\frac{1}{2}$, from the conventional \$5. It is obvious that if a stock is 50 in London, it is 48.75, or $48\frac{3}{4}$, at the parity here.

There are difficulties in connection with the collection of prices in London which people used to New York Stock Exchange methods do not appreciate. Actual sales are not recorded there. The prices at which a few transactions have been made are marked on the official list, but there is no means of telling whether the market has dealt in 5,000 shares or 500,000 during the day. The London ticker only quotes bid-and-asked prices, and never records the price at which any particular transaction was done.

Under the rules of the London Stock Exchange, the quotation of a price by one member to another binds the member who quotes to buy 100 shares at his bid price, or sell 100 shares at his asked price, if the other member chooses to trade. This has the effect of securing a really close bid-and-asked price. It is also the reason why an arbitrage house will know the London market price better than any news agency can.

The London system has its advantages and its disadvantages. In our market the jobber's turn is saved, but, in an excited and feverish market, the broker may be hours before he can trade at all. In London he is always sure at being able to sell at some price or buy at some price—both very important conditions in a panicky market, when it often happens here that the broker had to offer the stock down indefinitely until he finds a purchaser. In the May panic of 1901 Jersey Central was offered down here from 153 to 102 without a single transaction. The stock was sold at 102 and the next transaction was 148. This would have been impossible in Lon-

don. The jobber might have made a very wide price, but the broker would have been able to sell for his customer at worst within five points of the previous quotation.

REFERENCES

- "The New York Stock Exchange," Francis L. Eames, 1894.
"The Stock Exchanges of London, Paris and New York," George R. Gibson, 1889.
"The Stock Exchange" (London and New York), F. W. Hirst, 1911.
"History and Methods of the Paris Bourse," E. Vidal, United States Senate Document 573, 1911.
"The Stock Exchange and Its Machinery," R. W. Babson.
"The New York Stock Exchange," M. King, 1904.
"Treatise on the Laws of the Stock Exchange," Schwabe and Bronson.
"Rules and Usages of the Stock Exchange" (London), 1901.
"Treatise on the Law of Stock Brokers and Stock Exchanges," John R. Dos Passos, 1905.

CHAPTER XI

NEW YORK STOCK EXCHANGE CLEARING-HOUSE

The growth of the stock-market is limited only by the ability of the money-market to supply the necessary banking accommodations. No active broker, unless possessed of immense resources, could transact a large business without the temporary credit extended to him by his bank through certification of his checks. There is a limit to the ability and willingness of the banks to extend the benefit of such certification.

That limit seemed to be reached in 1892, when the banks, alarmed by the large certifications required by the brokers, threatened action, which finally forced the Stock Exchange to adopt a system that would reduce the volume of required certification. The result is the Stock Clearing-House of the New York Stock Exchange. For many years there had been agitation in favor of stock clearances. As early as 1857, only four years after the establishment of the Bank Clearing-House, it was proposed to extend the same system to stocks. During the period of the exciting speculation in gold after the war, transactions in gold were cleared with success through the New York Gold Exchange Bank, although the system did not commend itself as one adapted to stocks. The first stock clearing system was successfully established in Frankfort in 1867, and was speedily adopted by Berlin, Hamburg, Vienna, and London. At various periods attempts were made to found a Stock Clearing-House in New York, but they all ended in failure. In 1883, Controller of the Currency John J. Knox called attention to the London Stock Clearing-House,

and suggested the adoption of a similar system as the means of reducing the evil of overcertification.

In 1892 R. L. Edwards, President of the Bank of the State of New York, which did a heavy business with brokers, wrote to the president of the Exchange stating that there would be a probable curtailment of certification unless something was done. Then, mainly through the labor of Francis L. Eames, the present stock clearing system was adopted and went into effect on May 17th, the one hundredth anniversary of the broker's agreement of 1792, out of which the Stock Exchange grew.

For many years the Philadelphia Stock Exchange had had such a system in successful operation, and the Boston Exchange had recently adopted it. In European cities, as has been stated, clearances had long been in operation. But the European system was and still is based on fortnightly settlements, and the New York Exchange, long accustomed to daily deliveries of stock, preferred a system of daily clearances. Although late in adopting this clearance system, the New York Stock Exchange has succeeded in establishing one which, for the extent of its transactions and its adaptibility to the growing business of the country, has no equal anywhere.

If this Exchange [wrote the Special Committee of the Exchange in 1892 in recommending clearances] is to take the proper place in the future among the stock-markets of the world, a system of doing business will be required which will stand the strain of a volume of business larger than any heretofore known. Our present system of actual payment of entire value in every transaction blocks up in active times both banks and offices to an intolerable extent, and is an obstacle to the growth of the business commensurate with the growth of the country. For causes well understood, the banking facilities for this business have not increased during recent years. A proper system of clearing by largely reducing the volume of checks and deliveries would re-

lieve both offices and banks of much of the confusion and risk with which we are so familiar.

Legality.—Speaking of the legality of clearances, the report said:

The laws of this State require in all contracts an intent to deliver. At the present day, on the various exchanges, transactions in securities and agricultural products have reached such magnitude, that to pass the actual property or warehouse receipt or the certificate of stock into the hands of each party to every contract is impossible. The business of the world is now too large to be transacted in that way. Contracts on which the actual delivery of the property can be enforced if desired make the markets of the world.

The report states that the courts have held that such contracts show the required intent to deliver and are thus legal.

The Stock Exchange Clearing-House has fulfilled every prediction made in this report. Writing in 1894, two years after its establishment, Mr. Eames said that “during the panic of 1893 failures on the Stock Exchange would have been vastly more numerous had there been no clearing system in operation.” So in the unequaled speculation of 1901, the clearing system proved more than adequate to every demand upon it. As a matter of fact, it has expanded to an almost unlimited degree the capacity of the stock-market. With its aid the mechanism of Wall Street appears powerful enough to conduct easily and well all the possible operations of the future. The importance of the Clearing-House can therefore be scarcely overestimated.

It is conceded that it would have been impossible to have transacted the stock business of 1901 ex-Clearing-House. The machinery of the Street would have broken down. Even on the panic day of May 9, 1901, when the total sales of stocks were 3,336,695 shares, and when

the Street was convulsed by the tremendous fall in prices, there was no failure of the Clearing-House system. Transactions of the 9th were cleared as usual on the 10th, with the following result:

Shares cleared both sides, including balances....	12,131,600
Total value both sides, contracts and balances..	\$961,300,000
Share balances one side	1,714,800
Value share balances one side	\$129,800,000
Cash balances, one side	\$5,461,700
Number of parties clearing	452
Banks certification obviated	\$221,050,000

On the same day the transactions of the Bank Clearing-House (the heaviest on record up to that time) were \$622,410,525, or nearly \$339,000,000 less.

The Stock Clearing-House, however, has done a larger business even than that of May 10th. Inasmuch as there are no clearances dated on Saturday, the clearances of May 6th, 1901, represented two days' transactions. On that day the shares cleared both sides amounted to 13,313,800, having a value of \$1,132,200,000. Over one billion dollars in one day! The bank certifications obviated amounted to \$286,100,000.

The statistics for the two years 1893 and 1901 are of interest as summing up the operation of the system in periods of panic and boom.

	1893.	1901.
Shares cleared both sides, including balances	256,335,400	926,347,300
Total value both sides, contracts and balances	\$16,169,800,000	\$77,853,500,000
Share balances one side	24,742,700	134,391,000
Value share balances one side..	\$1,470,700,000	\$10,930,853,000
Cash balances one side	\$33,116,400	\$116,849,300
Certification required	\$1,470,700,000	\$10,930,853,600
Certification obviated	\$5,143,300,000	\$17,065,042,800
Certification that would have been required without clearances	\$6,614,200,000	\$27,995,896,400

These sums are so great as to be beyond human comprehension. The highest monthly total of stock clearances in London was, in July, 1901, £875,728,000. The average daily saving to the banks in New York in certification amounts to more than \$50,000,000.

Capacity.—The Stock Clearing-House is capable of indefinite expansion; there seems to be no limit to the amount of business it could do. It has handled about 100,000 items in one day. One broker alone has turned in about 1,300 items. If the other 490 firms did the same there would be 637,000 items in one day. It follows, therefore, that the Clearing-House can handle at least six times its business in 1901, and that is an underestimate.

Through its operation 65 per cent. of all the shares dealt in are eliminated in deliveries, and more than 90 per cent. of the number of checks is done away with. At the time this was written 87 stocks were regularly cleared, these representing over 85 per cent. of the total sales of the Exchange. All sales in these stocks are cleared, except at the time they are made it is expressly stipulated that they shall be ex-Clearing-House.

Simplicity of System.—The operation of clearing is simplicity itself. A sells 100 shares of Atchison to B, who likewise sells 100 shares of the same stock to C. Now, instead of A delivering the stock of B, and then B delivering it to C, which was the method of business before the Clearing-House was established, A, under the new system, delivers the stock directly to C.

This operation is precisely the same as that which forms the basis of foreign exchange. But in stock clearances the balances are settled in both stocks and money. This duality of settlement is what makes the stock clearing system so puzzling to those not instructed in its methods. In reality the system is not at all compli-

cated. The reason for the double settlement may be easily reasoned out. In the example given, A must deliver to C stock he has sold to B, but the price at which he has sold to B may be different from that at which C bought of B. Consequently there must be a settlement price established, so that clearances may be made equitably. It follows that there must also be a cash settlement to make up the difference between the contract or purchase price and the settlement price. This may be made clearer by two simple illustrations.

A sells 100 shares of Atchison at 75 to B, who sells the same amount to C at 76. The clearance then proceeds as follows: A is directed to deliver the stock to C, who pays him 76 for it. But as A sold to B at 75, he gets \$1 a share, or \$100 for the 100 shares, more than is due him. So A draws his check for \$100 to the order of the Clearing-House and delivers it with his clearance sheet. C having got his stock at the price he contracted to pay for it, is satisfied. B having bought at 75 and sold at 76, has no delivery of stock to make, but he has a profit of \$100 coming to him, so he draws a draft on the Clearing-House for that amount. What is the result? A gets 76 for the stock he has sold minus \$100 paid to the Clearing-House. C gets the stock at the price he has contracted for, and B, who both bought and sold, gets his profit of \$100. The Clearing-House having received \$100 from A, has paid the same amount to B.

In Clearing-House transactions the firm that buys and sells the same stock clears the transaction on its own sheet, drawing on the Clearing-House for the amount of the profit, or paying to the Clearing-House the amount of the loss, as the case may be. But when the firm delivers its stock it delivers at a fixed delivery price, and must credit or debit itself for the difference between

the delivery and the contract price. In other words, the delivery price applies only to stock balances that must be delivered.

To make the operation clearer another illustration must be given. A sells to B 200 shares of Atchison at 75. B sells 200 shares of Atchison to C at 76, and 200 shares of Union Pacific at 100. C sells A 100 shares of Union Pacific at 101. The delivery or settlement price of Atchison is 77, and of Union Pacific 99. The clearance will then proceed as follows: A delivers 200 Atchison to C; B delivers 100 Union Pacific to A and 100 to C. C has no delivery, but receives 100 Union Pacific from B and 200 Atchison from A. As A, under the delivery price of 77, receives \$400 more for the 200 Atchison than the selling price of 75, and will pay 99, or \$200, less for 100 Union Pacific than the contract price of 101, he is a debtor of the Clearing-House for \$600. B clears 200 Atchison at \$200 profit, the difference between the contract purchase price of 75 and the contract selling price of 76. But in delivering 200 Union Pacific to A and C at the delivery price of 99, he gets \$200 less than under the contract selling price of 100. So B is a creditor of the Clearing-House for \$400. C clears 100 shares of Union Pacific at a profit of \$100, the difference between the contract purchase price of 100 and the contract selling price of 101, but he pays \$100 less for the 100 Union Pacific he will receive from B under the delivery price of 99 than he contracted to pay, so these two items balance each other. C pays, under the delivery price of 77, \$200 more for his Atchison than the contract price of 76, and has therefore a credit of \$200 at the Clearing-House. The Clearing-House would receive \$600 from A, and pay \$400 to B and \$200 to C, and the deliveries of balances of stocks would then proceed as already indicated.

This illustration shows the process of clearance and the difference between contract and delivery prices, but inadequately indicates the advantages of the Clearing-House in reducing deliveries and obviating certifications. The operation of clearance looks simple when reduced to this alphabetical form, but when the operations of nearly 500 firms, each making many purchases and sales every day, are to be cleared, the system, while precisely the same, is working on so large a scale and in so many different stocks that it is not surprising that the outsider, in trying to understand it, gets lost in the maze of stock deliveries and cash settlements. In the practical working of the system, however, there is nothing involved or uncertain; never once has the machinery broken down or become clogged. In panic and in boom it has worked with precision, accuracy, and secrecy.

Description.—For the sake of an illustration it is necessary to go through the forms of an actual clearance.* The firm of Wilson, Morgan & Company, of 45 Wall Street, has through its Board member, Mr. Morgan, bought or borrowed 1,500 shares of Steel, preferred, at varying prices from eight different firms, 700 shares of Atchison from one firm and 700 of Union Pacific, preferred, from another. On the same day it has sold or loaned 700 shares of Atchison to one firm, 1,000 shares of Union Pacific, preferred, to five firms, and 1,300 shares of Steel, preferred, to one firm. This was not a very large day's business, but it is better for the purposes of illustration than much greater operations would have been. Yet, even on this day, Wilson, Morgan & Company had had dealings with seventeen different firms, bought 2,900 shares of stock and sold 3,000. Under the old no-clearance system it would have had to make seventeen different settlements on this day, involving

* The names used are fictitious.

the sum of \$519,411.14. But by means of the Clearing-House it is enabled to settle the whole business by drawing a draft for \$461.14 and delivering 300 shares of Union Pacific, preferred, for which it receives a check for \$26,400 and by accepting 200 shares of Steel, preferred, for which it gives a check for \$18,800. The clearance is therefore reduced from seventeen deliveries to two, and from seventeen checks amounting to \$519,411.14 to three checks amounting to \$45,661.14.

This is by no means an uncommon case. Many might have been given in which the process of elimination was greater. There has been one instance in which 204,000 shares, valued at \$12,500,000 on one side, have been settled by a payment of about \$10,000.

Mr. Morgan having made his purchases and sales in the Board-Room, reports them by telephone to his firm. In ex-Clearing-House transactions comparison slips would now have to be made out, but in Clearing-House transactions clearance or exchange tickets take their place. The seller is obliged to send to the office of the buyer a ticket printed in red on white paper to distinguish it from the buyer's ticket, which is printed in black on yellow paper. This record is in the form of an order on the Clearing-House for the delivery or the receipt of the stock. For instance, Wilson, Morgan & Company having bought 100 Steel, preferred, at $94\frac{3}{4}$, from Watson, Hubert & Company, receives from that firm a white paper ticket printed in red as shown on page 172.

Wilson, Morgan & Company compare this ticket with their own record of the transaction, and if the two agree the firm gives in exchange a yellow ticket that it will receive 100 shares of Steel, preferred. The firm having sold 100 Union Pacific, preferred, at $88\frac{1}{4}$, to Roberts, Blair & Company, sends to its office a white-red ticket

No. 23

New York, Jan'y 22, 1902

CLEARING-HOUSE OF THE NEW YORK STOCK EXCHANGE,

RECEIVE FROM

Wm Morgan & Co

100 shares Am Pac Rfa @ \$825

for account of the undersigned.

Robert Blair & Co

BUYERS' CLEARANCE TICKET

No. 1

New York, Jan'y 22, 1902

CLEARING-HOUSE OF THE NEW YORK STOCK EXCHANGE.

DELIVER TO

Wm Morgan & Co

100 shares Atul Rfa @ \$9437⁵⁰

for account of the undersigned.

Wm Hurd & Co

SELLERS' CLEARANCE TICKET

like that it has received from Watson, Hubert & Company. Roberts, Blair & Company compare the ticket with their record, and, if found correct, give a yellow-black ticket—shown on page 172—in exchange.

Having made these comparisons and exchanges of tickets with all the firms with which it has had dealings, Wilson, Morgan & Company now make up their clearance sheet for the day's transaction with the result shown in the accompanying folder.

As the firm has bought or borrowed and sold or loaned 700 shares of Atchison, all that it is necessary to do is to ascertain the difference between the buying contract price and the selling contract price. As it bought 1,500 shares and sold 1,300 shares of Steel, preferred, it can clear on its own sheet 1,300 shares in like manner by ascertaining the difference in contract prices, leaving a balance of 200 shares to be received. As it bought 700 Union Pacific, preferred, and sold 1,000 shares, it can clear 700 shares by finding the difference between the contract prices, leaving 300 shares to be delivered. As these deliveries are to be made at the fixed delivery prices, the firm must ascertain the difference between the contract and delivery prices to ascertain what is its credit or debit. The firm bought the 1,500 shares of Steel, preferred, for \$141,575, and sold 1,300 shares for \$122,200, leaving \$19,375 as the cost of the remaining 200 shares. But as the delivery price is 94, it will actually pay only \$18,800 for the stock on delivery. So that it is debit for \$575 to the Clearing-House, which will pay the sum to the firm or firms to which it rightly belongs. The profit on the 700 shares of Atchison is \$710.34, which is therefore due the firm from the Clearing-House. There now remains the Union Pacific, preferred, 700 of which were bought for \$61,600 and 1,000 sold for \$88,325.80. It is due to receive, therefore, \$26,-

Clearing House of the N.Y. Stock Exchange.	No 575 New York, N.Y. May 22 1902
Approved.	Knickerbocker
Manager.	Pay to the order of the undersigned Four hundred and sixty one & 100/100 Dollars as advised this day by the Clearing House of the N.Y. Stock Exchange.
S 161 121	J. H.

THE CLEARING-HOUSE DRAFT

725.80 for the 300 shares more that have been sold than bought, but under the delivery price it will receive only \$26,400, so that a balance of \$325.80 is due it from the Clearing-House. It appears, therefore, that the firm is debtor \$575 to the Clearing-House and creditor \$710.34 and \$325.80, or a total of \$1,036.14, leaving a credit balance of \$461.14.

It is all a matter of simple bookkeeping. The firm now draws a draft for its credit balance on the Manhattan Bank, in which the Clearing-House keeps its account. The form of this draft is shown on the preceding page.

CLEARING-HOUSE OF THE NEW YORK STOCK EXCHANGE.

THE UNDERSIGNED WILL **DELIVER** ^{THE} FOLLOWING **BALANCE** OF STOCK
AT THE DELIVERY PRICE

SHARES	STOCK	DELIVER TO
300	In Pac Pfd	

DATE

1/22/02

NAME

Wilson, Morgan & Co

No.

575

STATEMENT OF STOCK TO DELIVER

This draft, together with the clearance sheet and all the exchange tickets it has received from the firms representing the other side to the transactions, Wilson, Morgan & Company deliver at the Clearing-House within four hours after the close of the Exchange, on the day that the transactions are made, except Friday. Friday's

and Saturday's sheets are turned in on Saturday and the clearance is made Monday. The other firms will send to the Clearing-House the tickets Wilson, Morgan & Company have given out, so that both sides have complete vouchers for the sale and the Clearing-House has full authority to clear. If Wilson, Morgan & Company's sheet, instead of showing a credit in their favor, had shown a debit, it would have sent, instead of a draft, a check for the amount of the debit on the firm's own bank.

At the same time it delivers the sheet at the Clearing-House it must hand in statements of the amount of stock it has to deliver or to receive on balance, in the form shown on page 176.

The Clearing-House, having in the meantime examined and audited all the items and made up its allotment sheets, will the next day at 9.30 A. M. return this statement to Wilson, Morgan & Company, with the name of the firm to which it must deliver the Union Pacific, preferred, or from whom it must receive the Steel, preferred, as the case may be. About noon of the same day it will receive back the draft, with the signature of the manager written in the margin under the word "Approved." This draft it will deposit in its bank and collect through the Bank Clearing-House. This closes the firm's dealings with the Clearing-House for the day, but it must now deliver the 300 Union Pacific, preferred, to the firm indicated by the Clearing-House, and for this it will receive \$26,400 and must accept 200 shares of Steel, preferred, for which it must pay \$18,800. When the accounts are balanced the result will be exactly the same as if it had had separate settlements with each of the other seventeen firms with which it had dealings the day before. The difference is that it has saved time, trouble, and, above all, the extra bank certification of

checks involved in ex-Clearing-House transactions. Failure to deliver or receive stock after passing through the Clearing House is dealt with under the rules of the Exchange governing failures to fulfill contract.

It may be remarked that the Clearing-House in cases of insolvency has saved much of the time and loss involved in making settlements. For the service performed by the Clearing-House each firm pays $2\frac{1}{2}$ cents per 100 shares of \$100 par value. Only 100-share lots and multiples thereof are cleared. No bonds are cleared except on special occasions. Fines are imposed for mistakes and delays in delivering sheets, etc. Tickets that are exchanged and sent to the Clearing-House must agree, or both parties are fined.

The delivery prices are established by the Clearing-House every afternoon. These are as near as possible to the closing prices of the day, avoiding all fractions, and as soon as established are sent over the tickers.

The whole system of stock clearances on the outside of the Clearing-House has now been explained. The system within the Clearing-House is fully as simple, accurate, and clear. As the hours are long, the work going on by night as well as day, two managers are employed and an ample force of clerks. Everything is systematized as completely as in a bank. Each clerk has his appointed place and duty. The clerks at the windows who receive the clearance sheets and tickets examine the items and total to see that they are properly made out, and then they are passed to other clerks, who audit them carefully. The exchanged tickets are distributed in tiers of boxes like mail in a post-office, and these tickets are taken to clerks who compare them with the clearance sheet. The tickets for delivery of stock balances are also sorted and taken to the clerk who makes out the allotment sheets. Each stock has its own sheet, on the

ST. LOUIS & S. F. 2ND PREF.

BALANCES

Jan 22^d 1902

No.	SHARES	WILL RECEIVE	No.	SHARES	WILL DELIVER
1	100	J. P. Smith & Co	1	200	J. Dawson & Co
2	2	H. Jones & Co	2	5	McLure, Hays & Co
3	1	Dawson & Brown	3	1	Robbins Bros
4	4	V. W. James & Co	4	1	H. L. Kering & Co
5	6	Cullen & Muldrow	5	3	C. H. Kieck & Co
6	1	J. C. Warrick & Co	6	3	Leach Bros
7	3	Crosby Jackson & Co	7	3	J. C. Lee & Co
8	18		8	18	
9			9		
10			10		
11					
12					
13					

THE ALLOTMENT SHEET

debit side of which are put the names of those due to receive stock, and on the credit side those who will deliver. It is now comparatively easy to make the allotments, as the specimen sheet on page 178 will show.

J. Dowson & Company deliver 200 to C. Jones & Company; Helm Hayes & Company, 400 to V. W. James & Company and 100 to J. C. Warwick & Company; Rollins Brothers, 100 to J. P. Smith & Company; H. L. Henry & Company, 100 to Lawson & Brown; C. H. Krouse & Company, 300 to Cullen & Mullen; Lamb Brothers & Company, 300 to the same firm; and J. C. Lee, 300 to Crosby, Jackson & Company. Of course there are always as many stocks bought as there are sold, so that both sides of the sheet will exactly balance.

Secrecy.—The establishment of the stock clearance system was long opposed because of fear that the clearance sheets would give too much information about important operations to the clerks in the Clearing-House. Experience has demonstrated that operations are as readily concealed under the new as the old system. Loans of stock, for instance, appear on the clearance sheets as sales, and any clerk seeing the sheet could not tell whether the transactions were loans or sales, and therefore the sheet would have no meaning to him. Likewise stocks that appear as having been bought may have really been borrowed in operations on the short side. Large operators nearly always employ two or more brokers, and conceal their operations by arranging their orders so as to prevent anyone from knowing what they are really doing. Even a broker may not be able to tell whether his customer is really a bull or a bear, for while the operator may be buying through this broker he is selling through another. How much less, therefore, can the clerk in the Clearing-House comprehend what he may

see of the transactions of the brokers. Besides, the work of the Clearing-House is distributed among many persons. One clerk sees only one small part of what is going on, just as a common soldier sees only the small section of the battlefield in which he is fighting, and is probably in entire ignorance of how the battle as a whole is progressing. The work must be done too quickly for close inspection, and, moreover, it is facilitated by the use of numbers. Each member and firm has a number, which he must stamp on everything he sends to the Clearing-House, and allotments are made and clearances consummated very largely by the use of these numbers. Persons are of no account in the Clearing-House. It looks merely at numbers, balances, and exchanges.

The Clearing-House guards its secrets strictly, and there has never been an instance of any disclosure of information that should be kept private. Clearance sheets and tickets are returned to the different firms after the clearance has been consummated. The Clearing-House keeps no records. Necessarily in making clearances it audits the great bulk of the transactions of the Exchange, no small service in itself.

Note.—It has been impossible to obtain statistics showing the operations of the Stock Exchange Clearing-House for any later year than 1901, although a statement for the panic year 1907 would have been valuable, especially as the clearing system contributed greatly to safeguarding the financial position in that time of panic by preventing many failures which would otherwise have occurred. Attention should be given to the report of the Hughes Commission confirming the statements of this chapter written years before, that, while the clearance system may facilitate gambling transactions, it is

absolutely necessary for the legitimate business and orderly transaction of the stock-market.

REFERENCES

"Stock Exchange Clearing-Houses," A. D. Noyes, *Political Science Quarterly*, VIII, 252.

CHAPTER XII

TOOLS OF WALL STREET

“Our current political economy does not sufficiently take account of time as an element in trade operations,” said Walter Bagehot. The Wall Street system, however, takes large account of time. Every part of its mechanism is regulated, as it were, by a time clock.

Most of the tools of Wall Street are time-savers. The six most important are:

The stock-indicator.

The telegraph.

The cable.

The telephone.

The news slips.

The market reports.

There was active speculation before the introduction, in 1867, of the stock-indicator, or “ticker” as it is called, but it is difficult to conceive now of a market deprived of its use and compelled to rely upon quotations carried by brokers from office to office. The very life of the Street seems to depend upon accurate, immediate, and continuous quotations from the Stock Exchange.

The Tape.—These are provided by the stock-indicator, a marvelous little instrument which prints upon a narrow ribbon of paper the sales and prices made in the Board-Room. The paper, which is in a roll or spool, feeds itself into the ticker, and after receiving there the printed impressions falls into a basket placed besides the machine. In the vernacular of the Street this paper is called the “tape.”

The Exchange has always zealously guarded its quotations, and has endeavored to prevent them from reach-

ing rival institutions or the bucket-shops. But it supplies the quotations to its members and the outside public simultaneously. Its own corps of reporters obtain the sales as they are made in the Board-Room and carry them to four telegraph stations placed in convenient parts of the room. These send the quotations instantly to a gallery where the employés of the two ticker companies are stationed. One of these, the New York Quotation Company, is owned and controlled by the Exchange, and it supplies the quotations to its members. Its tickers, about 1,150 in number, do not extend outside of the Wall Street district. The other company, the Gold and Stock, is independent of the Exchange, but gets the quotations simultaneously with the other, and has the right to sell them, under certain restrictions hereafter noted, to any one desiring them. As a matter of fact, tickers are to be found in almost every public place. They are indispensable adjuncts of every banking and brokerage office.

A number of years ago the Stock Exchange had a long controversy with the then existing ticker company. It was charged that the latter supplied indicators to bucket-shops, and the Exchange was bound to break up this abuse of its quotations. The controversy was carried into the courts, and the question was raised as to the right of the Exchange to withhold its quotations from the public. In the end the Exchange made a satisfactory contract with the company, supplying the public with quotations, and established its special service for its own members.

While the quotations are reported as soon after they are made as it is possible to gather them, it takes some time, of course, to get them to the indicator, and it follows that the ticker is always a little behind the actual market. On an ordinary day the difference in time be-

tween, say, the close of the market and the record of the final sales on the tape may not amount to more than one or two or three minutes, but on a very active day, when the transactions are heavy, it has taken the ticker ten minutes and even more to record the accumulation of sales. The speed with which the sales made in the Exchange reach the public is marvelous, and proves the perfection of the system employed. Occasionally, a mistake is made, but there is always a swift correction.

Abbreviations.—As there are more than a thousand different stocks and bonds more or less regularly traded in at the Exchange, many of them bearing the long names of their corporations, it is necessary to use abbreviations in reporting quotations on the tape. To the uninitiated, the tape appears to be a meaningless jumble of letters and figures almost as undecipherable as a cable code or Egyptian hieroglyphics. But the broker and regular habitué of the Street learns to read it as readily as a priest reads his Latin. A large chart containing the abbreviations goes with each ticker, but it is rarely consulted. Here are the abbreviations used for a few of the more active stocks:

- A Atchison, Topeka & Santa Fe.
- B Brooklyn Rapid Transit.
- C Amalgamated Copper.
- D Denver and Rio Grande.
- E Erie.
- G Consolidated Gas.
- H New York & Harlem.
- J Central Railway of New Jersey.
- K Missouri, Kansas & Texas.
- L Louisville & Nashville.
- M Manhattan Elevated.
- N Norfolk & Western.
- P Pacific Mail.

Q	Chicago, Burlington & Quincy.
R	Rock Island Co.
S	American Sugar Refining Co.
T	Texas & Pacific.
U	Union Pacific.
W	Western Union.
BO	Baltimore & Ohio.
CA	Canadian Pacific.
DL	Delaware, Lackawanna & Co.
GC	General Chemical.
HR	International Harvester Co.
IP	International Paper Co.
LR	United States Leather Co.
MM	St. Paul, Minneapolis & Manitoba.
NP	Northern Pacific.
OW	New York, Ontario & Western.
PA	Pennsylvania R. R.
RG	Reading Co.
SB	Seaboard Air Line.
PR	Preferred.
X	ex-dividend.
UR	Under the Rule.

Several of the abbreviations are responsible for the popular Street nicknames of leading stocks. For instance, because MP stands on the tape for Missouri Pacific, that stock is generally called "Mop." NP stands for Northern Pacific, which goes by the name of "Nipper," the common being called "little" and the preferred "big." PO standing for People's Gas Light and Coke Company, that stock is often called "Post-office." The same law of economy in the use of words applies to all the active stocks.

On page 186 is a section of a stock tape just as it comes from the ticker.

This being interpreted reads: 200 shares Union Pacific

at $17\frac{1}{4}$, mistake, and thrown out; 200 shares Union Pacific at $177\frac{1}{4}$; 400 American Smelting & Refining at 74; 200 Lehigh Valley at $178\frac{3}{8}$; 600 do. at $178\frac{1}{2}$; 200 do. at $178\frac{3}{8}$; 100 shares Utah Copper at $50\frac{3}{4}$; 1,000 shares United States Steel at $64\frac{3}{8}$; 600 at $64\frac{3}{4}$; 200 at $64\frac{3}{4}$; 100 Chicago, Milwaukee & St. Paul at $111\frac{1}{4}$; 100 American Tobacco, preferred, at $100\frac{3}{4}$; 200 Miami at $22\frac{1}{8}$; 100 at $22\frac{1}{8}$; 200 at $22\frac{1}{4}$; 900 Union Pacific at $177\frac{1}{4}$; 100 Republic Iron & Steel at 23; 200 Reading at $151\frac{3}{8}$; 100

U	U	AR	LV
200.174 $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$	200.177 $\frac{1}{4}$	400.74	200.178 $\frac{3}{8}$.600. $\frac{1}{2}$.200. $\frac{3}{8}$

UT	US	ST	ATP	MI
50 $\frac{3}{4}$	1000.64 $\frac{7}{8}$.600. $\frac{3}{4}$.200. $\frac{3}{4}$	11 $\frac{1}{4}$	100 $\frac{3}{4}$	200.22 $\frac{1}{8}$. $\frac{1}{8}$

U	RBC	RG	TOU	P	OW	IBP
200. $\frac{1}{4}$	900.177 $\frac{1}{4}$	23	200.151 $\frac{5}{8}$. $\frac{3}{4}$	18 $\frac{3}{8}$	42 $\frac{3}{4}$	40 $\frac{3}{4}$ 200.47

RG	CO	NV	C
300.151 $\frac{5}{8}$.200. $\frac{5}{8}$.1000. $\frac{1}{2}$.700. $\frac{5}{8}$	75 $\frac{1}{8}$	18 $\frac{5}{8}$	63 $\frac{1}{2}$

US	RG	U	NP
600.64 $\frac{3}{4}$	151 $\frac{1}{2}$	200.177 $\frac{1}{4}$.800. $\frac{3}{8}$	200.118 $\frac{3}{4}$

THE STOCK TAPE AS IT COMES FROM THE "TICKER"

at $151\frac{3}{8}$; 100 Toledo, St. Louis & Western at $18\frac{3}{8}$; 100 do. preferred, at $42\frac{3}{4}$; 100 Ontario & Western at $40\frac{3}{4}$; 200 Interborough Metropolitan, preferred, at 47; 300 Reading at $151\frac{5}{8}$; 200 at $151\frac{5}{8}$; 1,000 at $151\frac{1}{2}$; 700 at $151\frac{5}{8}$; 100 Chesapeake & Ohio at $75\frac{1}{8}$; 100 Nevada Consolidated Copper at $18\frac{5}{8}$; 100 Amalgamated Copper at $63\frac{1}{2}$; 600 United States Steel at $64\frac{3}{4}$; 100 Reading at $151\frac{1}{2}$; 200 Union Pacific at $177\frac{1}{4}$; 800 at $177\frac{3}{8}$; 200 Northern Pacific at $118\frac{3}{4}$.

"The letters and figures used in the language of the

tape," said a noted Boston operator, "are very few, but they spell ruin in ninety-nine million ways."

Notwithstanding the abbreviations, the number of printed impressions every day is very large, although much less than the number of shares sold. For instance, on April 30, 1901, when 3,234,339 shares were sold, besides a large number of bonds, the printed impressions on the tape numbered 79,200. The New York Quotation Company has a delicate little machine for taking an accurate count of the characters printed on the tape, and it has kept a record for a number of years past. Their record is as follows to which is added the number of shares traded in and their approximate value:

Year	No. of Shares Traded in	Approximate value *	No. of Impressions on Stock Tape
1890	71,282,885	\$ 3,977,664,193	7,200,000
1891	69,031,689	3,812,247,419	7,200,000
1892	85,875,092	4,874,014,262	7,104,010
1893	80,977,839	4,550,260,916	6,900,700
1894	49,075,032	3,094,942,769	5,500,000
1895	66,583,232	3,808,338,604	6,814,900
1896	54,654,096	3,329,969,940	6,324,000
1897	77,324,172	4,973,553,065	8,232,000
1898	112,699,957	8,187,413,985	10,324,600
1899	176,421,135	13,429,291,715	11,931,700
1900	138,380,184	9,249,285,109	10,217,100
1901	265,944,659	20,431,960,551	12,830,500
1902	188,503,403	14,218,440,083	11,139,900
1903	161,102,101	11,004,083,001	10,276,100
1904	187,312,065	12,061,452,399	9,874,700
1905	263,081,156	21,295,723,688	10,420,400
1906	281,298,010	23,393,101,482	10,738,100
1907	196,438,824	14,757,802,189	8,808,200
1908	197,206,346	15,319,491,797	9,553,600
1909	214,632,194	19,142,339,184	10,130,400
1910	164,051,061	14,124,875,897	8,260,100
1911	127,208,258	11,003,600,829	7,719,840†

* The approximate value of all the stocks traded in on the New York Stock Exchange in twenty-one years amounted to about \$240,-

In 1910 it took one hundred and five thousand pounds of paper to supply the tickers of the New York Quotation Company.

The chart below, while applying only to the number of printed impressions on the tape, is given because it is also valuable as showing the volume of stock and bond transactions from 1890 to 1901. As

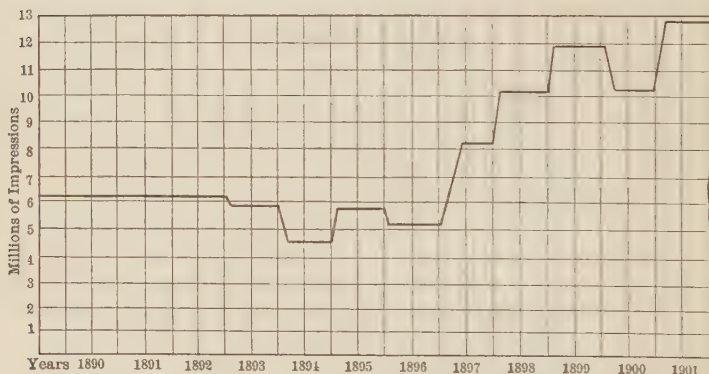


CHART SHOWING NUMBER OF IMPRESSIONS ON TAPE

the sales are almost always heaviest in the bull years, the chart may be taken as a bird's-eye view of the stock-market during that period.

The ticker, among its other offices, is a timekeeper for the Street. The rule for delivery of stocks being very strict, and the time for delivery expiring at 2:15 P. M., the ticker every day at fourteen minutes after two prints "time" on the tape, and shortly after the instrument gives fifteen distinct beats, at the end of which it is exactly settlement time. Nearly every timepiece in the Street is regulated by the tape.

000,000,000, of which about \$119,000,000,000 represents the dealings of the last seven years. In ten years the stock sales exceeded the present estimated wealth of the United States.

† December impressions partly estimated.

Besides the 1,150 stock tickers operated by the New York Quotation Company, the Gold and Stock Company operates about seven hundred and fifty, rented to customers in Manhattan, Brooklyn, and Jersey City. No one can rent one of these machines whose name has not been approved by a committee of the Exchange. This rule is being observed to prevent the tickers being placed in bucket-shops. Besides the stock tickers, there are one hundred machines reporting the grain and produce quotations of the New York Produce Exchange, one hundred giving the quotations of the Chicago Board of Trade, fifty giving the quotations of the Cotton Exchange, and twenty-five reporting the quotations of the Coffee Exchange. There are also over a thousand other tickers supplying financial, sporting, and general news. Some of these tickers print the news on a broad ribbon of paper just as if it had come from a typewriter. Outside of New York there are twenty cities which have ticker services of their own. No better proof is needed of the universality of speculation.

Quotations Non-official.—The Stock Exchange reports, but does not guarantee its quotations. Every day at the close of the market, a printer, as a private business enterprise, publishes a complete record of the day's transactions. This is a semi-official, but not an official quotation list. The printer has the authorization of the Exchange, and he is obliged quickly to correct every error. The list as a matter of fact is correct, but it is not an official record. Moreover, the Exchange keeps no official statistics.

The Telegraph.—Of the value to Wall Street of the telegraph it is hardly necessary to speak, so universal has become the use of this great tool of business. Dr. Norvin Green, a few years ago, estimated that one person out of sixty in the United States made use of the

telegraph, and that 46 per cent. of all the messages transmitted applied to speculative transactions. In this estimate, however, he included messages relating to the race-tracks. The percentage of speculative messages has undoubtedly increased since this estimate was made. As Wall Street is the hub of the great wheel of speculation, the extent of the use of the telegraph there is obvious.

Many brokers lease wires to connect their Wall Street offices with branches in other parts of the city and country. One firm has twelve private wires.

The Cable.—The cable may be said to have almost revolutionized the commerce of the world. The transactions and prices of one market are, by its use, now known simultaneously in the markets of every other country. Distance and time have been annihilated. "We are of opinion," says Arthur Crump, in his *Theory of Stock Speculation*, "that the complete communication that is now established between the commercial and monetary markets will tend gradually, if not rapidly, to diminish the effect of the commercial crisis."

The cable has put every market on a contemporaneous basis. The death of McKinley at Buffalo and that of Cecil Rhodes in South Africa was known in every great city of the world almost as soon as each event occurred; but seventy-five years ago the news of the death of Nathan Meyer Rothschild was carried to the London Stock Exchange by carrier pigeons. Several London brokers then maintained private systems of carrier pigeons connecting them with Paris. This was the early substitute for the cable.

James K. Medbury, writing three or four years after the establishment of the first working cable in 1866, the one laid eight years earlier having broken down, said that New York brokers were then paying \$1,000,000 a

year for London dispatches. Rates were very high in 1866. Twenty words to London cost \$100, as compared with \$5 to-day, and George Stoker, the cable-packer, began, by a system of codes, to pack several messages into one. In 1902, according to Vice-President Ward of the Commercial Cable, fully 95 per cent. of all cable messages were written in codes, so constructed as to make one word do the work of five and even twelve. Elaborate codes have been constructed, and by the aid of the Western Union Code book one can cable and telegraph to any part of the world, securing economy with secrecy. Many concerns, moreover, have private codes.

The manager of one of the leading cable companies has estimated that thirty per cent. of all the cable business of this country emanated from New York. How large Wall Street's share of this is may be judged from the fact that on an average there are one thousand Wall Street cable messages a day. While most cable messages are short, averaging four to six words, they tell a great deal. A banking house will sometimes pack a dozen or more cable transfers of money into one message. For the arbitrage business an express wire is needed. A cable company sets aside one of its London cables, during business hours, for this work. In the Exchange building telegraph and cable messages are sent by pneumatic tubes direct from the Board-Room to the telegraph offices.

Telephones.—In no other part of the world is the telephone put to such general and important use as in Wall Street, and its use has greatly increased in the last ten years, in both the stock- and money-markets. There are 408,769 telephones in New York City, and there are probably a greater number in the Wall Street district than in any other equal territory in the world. About five hundred of the members of the Stock Exchange maintain

private telephone connection to the Board-Room. Practically every order executed in the Exchange is received by the Board member from his office over the telephone, and as soon as the order is executed he reports the sale, the price, and the name of the other party to the transaction over the telephone. Business aggregating often over \$100,000,000 a day is thus actually transacted by telephone—a most impressive proof of the value of this invention, now in use only thirty-five years. In the Exchange elaborate provision has been made for an extended use of the telephone. Notwithstanding the noise and confusion on the floor, and the fact that many brokers are shouting through the telephones at the same time, mistakes are very rare. One was made some time ago when a broker mistook an order to buy as one to sell. The error cost him thousands of dollars. The mistakes over the telephone, however, are probably no greater than occur in written communications.

News Agencies.—Wall Street is always eager for the latest news. It is not content to rely on the morning and evening editions of the daily papers, or even upon the elaborate articles of the financial press. It must have the news the instant it develops. News is the very air that speculation breathes. To supply this need, two news agencies exist in Wall Street, one that of the New York News Bureau, and the other that of Dow, Jones & Company, founded by Charles H. Dow, one of the first to give a scientific form to stock-market reports. These two concerns issue every few minutes what are called the News Slips, which in the case of one firm are printed on yellow paper and in the case of the other on white. These slips are of convenient size, are printed on rapid presses, are distributed to subscribers by an army of messengers and a large number of highly trained men contribute to their publication. The brokers keep the

slips in pads, thus having at all times a complete record of the day. The whole world is covered by the slips and every item of general news is given, but especial attention is paid to railroad earnings, crop reports, and other matters bearing directly upon the market.

DOW, JONES & CO.

THE WALL STREET JOURNAL.

NEWS BULLETINS

ELECTRIC PAGE NEWS TICKER.

44 BROAD ST., NEW YORK.

Telephone One Broad.

Monday, Nov. 27, 1911.

No. 58.

RAILROAD EARNINGS.

St. Louis Southwestern:

	1911	1910	Inc.	Dec.
3rd week Nov.	\$285,000	\$284,732	\$268	.....
July 1-Nov. 21.....	4,804,707	4,938,396	....	133,689

Montreal—New York exchange 62½ cents discount; off 15½ cents.

COFFEE.

11:30 a. m.—Bid prices:

November, 14.50; December, 14.50; January, 14.15; February, 14.05; March, 13.74; April, 13.69; May, 13.63; June, 13.62; July, 13.61; August, 13.58; September, 13.55; October, 13.54.

STOCK MARKET.

Although trading was very quiet, the market showed an improving tendency in the early part of the second hour, the buying apparently representing an accumulative demand, instead either of covering of shorts or manipulation for the rise.

The interview given out by President James G. Cannon, of the Fourth National Bank, really indicates the sort of buying that is now seen in the market. Conditions have improved substantially, and stocks are being bought by large interests in the belief that despite certain political uncertainties the market is entering upon a new period of prosperity.

St. Paul rallied well, its action strengthening the impression that earlier in the session there had been manipulation designed to get prices down and encourage short selling of the stock.

Atlantic Coast Line and Louisville & Nashville showed quiet strength, and the street was still bullish on the stocks of southern roads because of the prosperous conditions prevailing in the South.

Chicago—Dec. wheat 94½, off ½; May wheat 100½, off ½; July wheat 94½, off ½; Dec. corn 63½, off ½; May corn 64½, unch.; July corn 64½, unch.; Dec. oats 47½, unch.; May oats 49½, off ½; Jan. pork 16.17, off 10; Jan. lard 9.30, up 3.

New York—Dec. wheat 99½, off ¾; May wheat 104½, off ½.

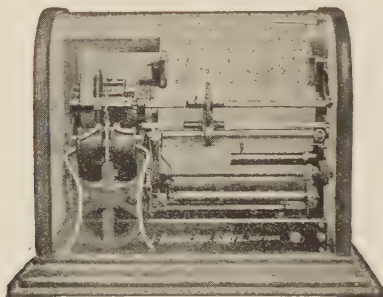
Paris—Wheat closed irregular, ½ up to ½ off; Jan.-Feb. 134c.

Cotton Exchange—Cotton market was heavy after the first hour, very close to the low levels of the season. There were reports of an easier spot situation from both the east and west sections. Bears hammered at times.

Call money lending and renewing at 2½%.

EXAMPLE OF WALL STREET NEWS SLIP

A reproduction of one of the Dow, Jones & Co. slips is given on page 193 in order that the reader may see for himself an example of the tabloid journalism upon which Wall Street depends. It may be said that no other journalism in the world is as rapid, accurate and efficient as that of Wall Street. Even the news slips,—speedy and admirable as they are—are not quite quick enough for all the Street's purposes. It wants the news flashed to the offices, even if in a form, that is a mere hint, conveying three or four words like a head line in a newspaper. To supply this demand both news agencies, in



PAGE PRINTER

addition to distributing printed slips, telegraph the news to subscribers, using marvelous little instruments which print their information on little sheets in the brokers' own offices. A picture of one of these page printers—that of the New York News Bureau—and a reproduction of a section of its product will give the reader an idea of this mechanism.

News Tickers.—All that is necessary to convey intelligence of importance to the banker or broker is a two-wire connection from the news bureau to a compact machine in his office, taking up a space of less than a square foot, and in most cases standing on a slender pedestal

THE STOCK MKT

AFTER CONTINUED HEAVINESS THE MKT TURNED AB-
RUPTLY MANY OF THE LEADING ISSUES BECOMING
STRONG AND MAKING SHARP ADVANCES. UN.PAC ROSE
ABOUT 2 PTS FROM ITS LOWEST AND A SUBSTANTIAL
RISE ALSO OCCURRED IN READING. STEEL COMM. AND
AME SMELTING. PRACTICALLY EVERYTHING ON THE
LIST SHARED IN THIS IMPROVEMENT. WHICH CARRIED
PRICES AT THE CLOSE ABOVE YESTDYS CLOSE. UN.PAC
SHOWED A NET GAIN OF ABOUT 1 PT. AND SUBSTANTIAL
NET GAINS WERE SHOWN IN READING. STEEL COMMON
AND AMAL.

GOVTS UNCHGD. OTHER BONDS IRREGULAR.

MONEY ON CALL -

OPEN 3. HIGH 3 3-4. LOW 3. LAST 3 3-4. CLOSED
3 1-2 A 3-4. RULING RATE 3 PC.

LOANING-RATES ON STOCKS

STEEL 3 1-4. OTHERS 2 1-2 AND 3. FAIR DEMAND.

HOW NEWS IS PRINTED ON A PAGE PRINTER

of height adjusted to the convenience of those in whose office it may be placed. A roll of paper, $5\frac{1}{2}$ inches wide, and a single wheel carrying type of the alphabet and numerals, are the only features about it that may be considered as attracting attention outside of the news matter that is transmitted.

The distance over which these instruments may be operated has as yet not been definitely ascertained, but in actual use the service from a central point close to the Battery extends as far as Yonkers, as well as across the East River far into Long Island. The page printer is in some respects an evolution from the Stock Exchange ticker, but with the printing wheel placed on a bar, along which it is forced by an auxiliary carrying bar. The instrument with its glass cover occupies a space only eight inches high by ten inches wide, and requires no outside assistance other than that of the keyboard operator. For all practical purposes, so far as the receiver is concerned, the page printer is automatic.

Market Reports.—The first regular daily stock-market report appeared in London in 1825, and the New York papers were quick to copy after their London contemporaries. It has only been within a generation, however, that the market report has become almost a science requiring mastery not only of the current influences affecting speculation, but also of the fundamental economic principles underlying business.

The market report performs this special service for the banker, the broker, and the operator. It saves him much of the trouble and time of analyzing reports and statements, and of interpreting movements. This is the special function of trade journalism. The business man would require a large reference library and several clerks to obtain for himself the information which is now furnished for him by the experts who write the leading

market reports. To William Dodsworth the Street owes no small debt for elevating the standard of financial journalism.

It was recently computed by the *New York Times* that the commercial and financial articles and market reports published every year in the daily, weekly, and monthly publications of this country would make nearly two hundred and seventy-one million books of the size of "David Harum."

More than one-fifth of everything published relates to business.

As long ago as 1692 J. Houghton published in London a weekly review of the commercial operations of that time, and it was from this, one of the earliest of financial publications, that Macaulay, many years later, obtained the materials for his account of the stock speculations near the end of that century.

CHAPTER XIII

THE CURB MARKET

There seems to be a strange affinity between stock-brokers and curbstones. For nearly a century the stock-market of London was on the sidewalks and in the coffee-houses of 'Change Alley, and an active, excited market it was at times. Guizot, in his account of "the delirium which mastered all minds" in Paris at the time of the speculation in John Law's Mississippi Company, says that the street called Quincampoix, for a long time devoted to the operations of bankers and brokers, became the usual meeting-place of the greatest lords as well as of discreet burgesses. It was filled with excited throngs of men all day. It was found necessary to close its two ends with gates, which were open from 6 A. M. to 9 P. M. Every house harbored business agents by the hundred, and the smallest room was let for its weight in gold. The street was indeed too small for the business crowded into it, and the brokers were forced into the Place Vendôme and the gardens of the Hotel de Soissons, where they put up booths for the transaction of their business.

Born on the Street.—The New York Stock-Market was born on the street. The first dealings in securities were under the buttonwood tree which stood in front of 68 Wall Street, and ever since that time, except during periods of profound depression, some part of the stock-market has always been located on the sidewalks and curbs. After deserting the shade of the buttonwood tree the street brokers located themselves on Wall Street near Hanover. During the Civil War the curb market was in William Street, between Exchange Place and Beaver, and while no record of transactions was kept, it

was believed that the trading in the street was heavier than that in the Exchange. It began at eight o'clock in the morning and continued until 6 P. M., or even later, and at night-time the market was transferred to the corridors of the Fifth Avenue Hotel. William Street at that time was almost continually impassable by reason of the crowd of brokers.

The curb market now has its regular meeting-place in Broad Street, between the Broad Exchange Building and The Wall Street Journal Building, and in stormy weather the brokers often seek the shelter of the corridors in the various buildings in the vicinity. During business hours, however, which last from 10 A. M. to 3 P. M., a hundred or more brokers, most of them young and athletic, may be seen assembled in the street. A stranger might think that a small sized riot had developed, so lawless seems the conduct of these brokers, but they are there for a serious purpose. There is a method in their madness, and at various times in the last ten years they have transacted a large amount of business. In 1899 the curb market assumed extraordinary proportions, resembling the activity of the old war times. In 1901 the market became less active, but still quotations were established for two hundred and sixty-three different stocks and bonds. The banner year, however, was in 1906, when the good times enjoyed by the Stock Exchange were also in evidence on the curb. Prices for bonds and stocks reached the highest levels of years. For example United Copper, which, in 1911, was quoted at about \$2 a share, sold in 1906 at high as \$77 a share. The culmination of this period was the panic of 1907.

Non-Exchange Securities.—No securities are traded in that are admitted to dealings in the Stock Exchange, so that many of the Stock Exchange houses have regular representatives in the curb market. There are many im-

portant issues dealt in on the curb, however, as a number of large companies have not applied for the listing of their securities on the Stock Exchange. The curb market is the abiding-place of stocks between the time of their issue and of their listing. Many stocks and bonds are even traded in before they are issued. This was the case with the United States Steel stocks and lately with issues of the City and Government bonds. This is in reality dealing in hypothetical securities, as trading is done on a basis of "when-as-and-if-issued." The market is divided up into groups, each group dealing in a different class of security. There are six different groups, known as "Coppers," "Bonds," "Cobalts," "Porcupines," "Industrials," and "Inactive Industrials." The total capitalization of all the companies whose securities are traded in on the curb amounts to the enormous sum of about \$500,000,000, and the annual number of bonds and shares of stock dealt in average about 15,000,000. Business since the panic of 1907, however, has been largely of a hand-to-mouth nature.

Organization.—For years, efforts were made to form some kind of an organization with by-laws and regulations for the transaction of business on the curb, but all these endeavors were of no avail until 1910 when the late E. S. Mendels, Jr., for almost forty years the "dean" of the curb market, succeeded in forming the New York Curb Association, and this organization has proved a success from the start. There are about two hundred and fifty members who pay annual dues of \$100 each. The Association has regular rules and regulations which, with a few exceptions, are similar to those of the Stock Exchange. One of the features of the curb market, as at present organized, however, is that trading in it is not restricted to members. The manual issued by the Association says:

The New York Curb Market is open to all who choose to trade there, but no one is obliged to accept any contract which is not acceptable. Strangers and others must be properly identified in justice to themselves and those they attempt to trade with, and they may be called upon to give up acceptable persons before the contract is closed. This is for the safety of all concerned.

The curb market is one of the most interesting features of Wall Street. Every business day, visitors from all over the world stop to watch the antics of the traders. They see varied colored caps, each color being a distinguishing mark of a firm; they see the traders signaling to near-by offices with their fingers, very much in the same manner that deaf and dumb persons "talk" to one another. These signals are an important part of the work of a curb market trader and are used extensively in arbitrage trading with curb markets and stock exchanges in other cities.*

* See statement regarding curb-market in Hughes Commission report.

CHAPTER XIV

THE INVESTMENT MARKET

That country is most prosperous, in the long run, and that people most happy, and that government the most secure against war and revolution, in which the great majority of its citizens save something out of their incomes for wise investment. Investment means provision for the future. It is insurance against sudden calamities. It is the safeguarding of wife and children. It is the reservoiring of capital for further national advance.

Task of Investment.—It was said by John Jacob Astor that he could hire plenty of men competent to collect the money due him from rents and other sources of income, but that it took all of his own time to see that his surplus income was well invested. The safe investment of money, by which is meant the purchase of securities or real estate for permanent holding, as a source of yearly revenue, requires time, close study, and sound judgment. Mr. Astor thought that he could depend only upon himself to do this work. That so many mistakes are made in investing money may be said, however, to be due either to too much dependence upon oneself or too much dependence upon others. A golden mean is best. Not every one can be an Astor.

As the country grows richer and has a larger surplus every year over and above the expenditures for living expenses, the more difficult becomes the task of investment, because the supply of safe investments may not keep pace with the expansion of surplus wealth. Then it is that investors take large risks buying securities of the second or third class. There soon comes a point

where investment itself becomes a mere speculation, when the purchase of doubtful securities outright becomes more perilous than would the buying of high-class dividend-paying stocks on margin.

Private capitalists, estates, insurance companies, and other corporations are constantly in the market seeking investments, and while, as compared with the speculative dealings, the investment business seems small, it is in reality very large and is constantly expanding. There exists in Wall Street elaborate machinery for investments. There are the great banking-houses which are constantly bringing out the new securities issued by the railroads and other corporations. There are banking-houses which make a specialty of the United States bonds. These or other firms also bid for new issues of State, county, and city bonds, which, if they secure the awards, they later sell over their counters to investors. Many brokers in and out of the Exchange confine themselves exclusively to investment securities; they take no margin accounts whatever. There are bankers and brokers who make a specialty of different classes of investment, as for instance government bonds (Federal, State, county and city); railroad bonds, equipment bonds, street railway bonds, other public service bonds (gas, water and power); and real estate bonds. Bond houses are both buyers and sellers of investment securities, and they act as advisers for and agents of investors as well as fiscal agents for corporations. There exists in the Street, therefore, every facility for the sale or purchase of high class securities. In recent years the big banks have established bond departments, and these are constantly expanding their activities and sales.

Here also comes every doubtful new scheme and enterprise seeking money for its promotion and offering stocks and bonds galore to investors. The promoter flourishes

in the Street in every form, and the investor must learn to distinguish between the reputable investment firm and the irresponsible seeker after other people's money. There are so many high class houses that no one ought to be deceived.

Standard investment securities are subject to fewer fluctuations in prices than speculative stocks, and they are less liable to manipulation and temporary influence. Permanent elements of value more than transient conditions of the market govern their price.

Conditions of the Problem.—The Wall Street man studies an investment from five standpoints:

1. Its yield in interest or dividend, for the object of investment is income.

2. Its security, for the safeguarding of the principal is the first consideration in the placing of money in an income producing bond.

3. Its duration, for the investor naturally prefers a security having a long time to run before maturity.

4. Its marketability, for the investor prefers that security which can most easily be sold in case he is compelled to part with it, and which can most readily be accepted by a bank in case it is offered as security for a loan.

5. Its taxation, for the investor prefers that bond which is either exempt from taxation, or which is subject to slight taxation. Under a 1911 law, all "secured debts" can now be made exempt from personal taxation in New York State by paying a registration fee of $\frac{1}{2}$ of one per cent. or \$5 per \$1000 bond.

A bond to command the highest price must pay a fair rate of interest, be of undoubted security, and have a long period to run. It may pay 6 per cent. a year and yet be of doubtful safety or of inferior standing, like a third mortgage or income bond. Or it may pay 6

per cent. and be a first-class mortgage on a property of known value, and yet have only two or three years to run. In either of these cases its value as an investment would be much impaired, and a 4- or 4½-per cent. bond issued by a leading corporation on undoubted security, and having a long period of years to run, would command a higher price.

Rate of Interest.—A generation ago even a high-class security had to pay as much as 7 per cent. a year in order to command a sale, but now American interest rates have declined to the level of those of Europe. In 1865 the Government paid over 7 per cent. interest on \$671,000,000 of its debt, 6 per cent. on \$1,213,000,000, 5 per cent. on \$245,000,000, and 4 per cent. on only \$90,000,000. To-day one-half of the outstanding bonds of the United States pay only 2 per cent. interest.

It is a rule that the more secure an investment the lower its rate of interest. If an absolutely safe investment pays a high rate of interest or dividend, it commands a premium which reduces the actual return on the investment to a level with the prevailing rates for securities of that class.

The premium is the price paid for a security over and above its par value. Thus, a United States 4-per-cent. bond due 1925, selling at 140, pays 4 per cent. on its par value of 100; at 140 it would yield to its holder 2.86 per cent. The calculation of bond values involves an intricate mathematical problem, which, however, can be avoided by the use of tables prepared by actuaries.

The bond houses become expert not only in estimating what is the theoretical value of a security as determined by its safety, its interest, its duration, and its taxation, but also as to its probable market price, as governed by the supply of investment money and other conditions. These houses are prominent as bidders for State and city

bonds. They will sometimes bid for an entire issue at a certain premium, and retail the same to investors at a higher price. All this requires close calculation and a sound judgment.

Instead of 7 per cent. being the standard rate of interest on a safe investment, as it was a generation ago, $3\frac{1}{2}$ to 4 per cent. may now be said to be more nearly the earning power of money when invested in a gilt edged security. The higher the rate of interest rises above 4 per cent. the less the security of the principal becomes, though the greater cost of living makes for an advancing level.

Different Classes of Investments.—Investments may be divided into the following general classes:

1. The woman's investment, in which absolute security is the first consideration;

2. The savings bank, the insurance company and the trustee's or executors' investment, in which the security purchased must be of a "gilt-edged" description, that is, possessing a high degree of security and meeting every requirement of a first class investment.

3. The business man's investment, which may possess a considerable speculative quality, requiring such attention upon the part of an investor as a keen business man is able to give to his daily affairs, but which affords a larger return upon the money and the possibility of an advance in price.

4. The speculative investment, in which both the risk and the possible return are greater, and which is bought not primarily for present income but more for future profit.

Some bond houses make a specialty of one or the other of these classes of securities, but many deal in all.

Selling Bonds.—In a sense Wall Street is a manufactory of securities; and like other manufacturers it employs every means for finding a market for its products.

Many of the bond houses employ expert salesmen who go out on the road, and personally interview bank officials and individual investors, explain the merits of the security they offer and seek to secure orders. This process does not materially differ from that of the "drummer" of a dry goods jobbing firm. Bond houses also send out letters and circulars by the thousand to selected lists of investors, and these letters and circulars are often very ably written.

Intelligent advertising of investment securities has in recent years grown to enormous proportions. The placing on the market of a big new issue of securities is often preceded or accompanied by an elaborate and costly educational campaign by the medium of advertising; while the ordinary daily business of marketing bonds is similarly facilitated. Firms of expert advertising men aid in the intelligent placing of these advertisements, while some investment houses have a special advertising adviser of their own. The scientific employment of publicity methods has become almost a fine art. The best advertising in the long run is that which tells, in an attractive way, the exact truth and which will use no newspaper or magazine that accepts dubious, or tipsters' "ads." Many of the magazines of large circulation have established investment departments employing able financial writers to answer subscribers' inquiries in regard to securities; and in this and other ways the public is gradually obtaining an investment education.

Many of the bond houses moreover establish elaborate statistical departments containing the very latest information in regard to every development in the railroad, industrial, mercantile and political world, and the statistical departments are not only an aid to the houses in selling securities but also materially assist their customers in arriving at a sound judgment as to values.

The large investor makes an intelligent distribution of his investments, not tying up all his surplus in one security or in one locality or even in one country. Investment has now become an international business. The capitalists of England and France have literally thousands of millions of dollars invested outside of their own countries; and even in the United States, notwithstanding our own vast territory, the resources of which are not yet fully developed, we are now exporting considerable capital. The big bond merchant, therefore, must in his touch upon world affairs become a good deal of a statesman as well as a financier. The wise distribution of risks is a science.

There are large daily sales of bonds in the Stock Exchange; and it is therefore a distinct advantage to be listed, for its marketability as well as its negotiability as security for loans is thereby increased. But the sales of bonds "over the counter" as the phrase is, are even larger.

REFERENCES

- "A Plain Guide to Investment and Finance," T. E. Young, 1908.
- "Stock Exchange Securities," Sir Robert Giffen, 1877.
- "Stock Exchange Investments," 1900.
- "Specimens of Investment Securities for Class-room Use," Wm. G. Sumner, 1901.
- "American Railways as Investments," Carl Snyder.
- "Art of Wall Street Investing," John Moody, 1906.
- "Investment Bonds," F. Lownhaupt, 1908.
- "Bonds as Investment Securities," *Annals of American Academy*, 1907.
- "Investments: What and When to Buy," R. W. Babson, 1908.
- "Art of Investing," 1888.
- "Anatomy of a Railroad Report," Thomas F. Woodlock, 1900.

CHAPTER XV

THE BROKER AND HIS OFFICE

A generation or two ago—and especially when Henry Adams wrote his account of the “Gold conspiracy” business and political morals in New York were at a very low ebb, and he described a broker as a gambler;* but even in the earlier days of Wall Street there were opposing views of the character and position of the stock broker. One regarded him as a rogue and another as a gentleman. All business, including that of the Stock Exchange broker, has improved in ideals and methods in recent years, and there would not now be such a differ-

* “Jay Gould was a broker, and a broker is almost by nature a gambler, perhaps the very last profession suitable for a railway manager. In speaking of this class of men it must be fairly assumed at the outset that they do not and cannot understand how there can be a distinction between right and wrong in matters of speculation, so long as the daily settlements are punctually effected. In this respect Mr. Gould was probably as honest as the mass of his fellows, according to the moral standard of the Street, but without entering upon technical questions of roguery, it is enough to say that he was an uncommonly fine and unscrupulous intriguer, skilled in all the processes of stock gambling, and passably indifferent to the praise or censure of society.”

HENRY ADAMS in 1870.

“As a body, the brokers are honorable men. When they make a bargain they will stand to it. Much has been said and written against brokers, but they are about the only class of men that will not back out of a bad bargain.”

“The stock-broker is a gentleman by birth and education, a gentleman in manners and habits, a gentleman in all the various relations of life—even to keeping his trotting horse, having a box at the opera and a pew in the church. The stock-broker is a scholar too. Some are historians; some novel writers, and some are poets. Some are members of the medical faculty; some are deacons in churches; some are politicians; some diplomatists. By nature the stock-broker is a talker, yet he knows when to hold his tongue. He will talk about everybody’s business but his own.”—*Hunt’s Merchants’ Magazine*, June and July, 1849.

ence of opinion as that exhibited in the quotations given in the foot notes. It is true, however, of the broker as it is of the banker and the merchant that his position in the community depends upon himself. If he is a good broker, he stands on a level with every other self-respecting business man. If he is a bad broker, his opportunities for mischief are infinite.

Middleman.—The broker is the connecting link between buyers and sellers. He is a middleman, one who negotiates sales or contracts as an agent. The word broker is old. The early English form was "broceur." By some it is believed to be derived from the Saxon word "broc," which meant misfortune; and the first brokers indeed appear to have been men who had failed in business as principals and been compelled to pick up a precarious living as agents. There are almost as many different kinds of brokers as there are lines of business. In Wall Street alone there are stock-brokers, investment-brokers, curb-brokers, two-dollar brokers, grain-brokers, cotton-brokers, coffee-brokers, ship-brokers, insurance-brokers, money-brokers, foreign-exchange brokers, bond-brokers; and there are large houses which combine nearly all these different kinds of brokerage.

The stock-broker is usually a man possessed with a superior endowment of brains. No fool can last long in the Stock Exchange. The broker, whether he is the office partner or the Board member, requires alertness, a habit of quick decision, accuracy, promptness, the ability to take large risks with good judgment and to read character readily, and a capacity of keeping cool in times of excitement. He must never lose his head, as the saying is.

Breadth and Narrowness.—The broker is narrow in the sense that he looks at everything through Wall Street spectacles. A thing is good or bad, wise or foolish, just

as it happens to affect the immediate interest of the Street. If, for instance, the market is depending upon a United States Supreme Court decision, the broker can not see why the decision is delayed. If there is a strike in the coal fields, he cannot see why the operators and miners should be so inconsiderate as to disturb the prices of stocks. He is impatient of any consideration other than that of his own interest. Still, that is a trait of human nature by no means confined to Wall Street. But the broker is broad in another sense. The Wall Street horizon is almost as wide as the world itself.

“The operators in the gold room,” wrote Horace White in his account of the gold speculation of the war time, “should be at the same time the best informed and the most intelligent business men in the country. They must have not only the best and latest information, but they must be able to determine at once what is the economic meaning and significance of any given fact which may come to their knowledge. They must be able to resolve the most complicated problems in mental arithmetic without a moment’s hesitation. If the Secretary of the Treasury has decided upon a certain measure of financial policy, or the President upon a certain measure of foreign policy; if there is a short corn crop, or a Fenian rebellion, a war-cloud in Europe, or a heavy immigration, or a great oil discovery, or a change in the tariff, or anything else which can affect the currency or the public credit, they must be able to melt down the mass and weigh the product in terms of standard gold. This is the work of omniscience. No man can do it.”

Yet Mr. White’s characterization of the task of the gold-broker of a generation ago serves well to describe the work of the stock-broker of to-day. He must keep in touch with every market abroad as well as at home. He must know something of the significance of par-

liamentary debates and congressional legislation. He studies bank statements, railroad reports, crop estimates, statistics of foreign trade, and the forces at work in domestic and international politics. As he must give advice which may make or lose money for his customers, he is obliged to keep an intelligent watch on everything of importance that is going on. As he is not omniscient, he often makes mistakes. But his grasp of the world's affairs is firmer than that of most other observers.

The broker is usually a gentleman and dresses well and lives well. Sometimes he is something more than a broker, and becomes a power outside of his own class. Brayton Ives, a former President of the Exchange, became a noted collector of books. Another President, A. S. Hatch, was a well-known worker in church missions. Still another President, J. Edward Simmons, was President of the Board of Education and later of the Chamber of Commerce. Another President, James D. Smith, was Commodore of the New York Yacht Club. S. V. White, besides being a broker, was a member of the bar of the Supreme Court, and served in Congress. Stedman was a poet. R. P. Flower was Governor of the State. Bird S. Coler served as Comptroller of the city. On the whole, brokers as a class compare well, mentally and morally, with other business men. They are always patriotic, if for no other motive than that of self-interest, for if the Government went down or suffered from domestic revolt or foreign invasion, the whole structure of Wall Street credits and values would collapse like a house of cards. During the Civil War the Exchange would not admit as member anyone suspected of aiding in the rebellion. The broker is proverbially generous. When he makes money fast, he spends it freely, and his contributions to charity are liberal.

Relations to Customers.—As regards their relations to

customers, brokers may be divided into two classes: first, those who do a strictly commission business and who are conservative in advice and dealings; and second, those who speculate on their own account as well as for their customers, who advise the taking of long chances, and who too often are bulls at top prices and bears at the bottom. It is needless to say that a wise choice of a broker is the first duty of one who is entering into the stock-market.

It is equally true that the broker should make a wise choice of a customer; for the connection between brokers and customers is as delicate as that between attorneys and clients. Indeed, some brokers use the word clients in speaking of their customers. If the customer is mean and unscrupulous, he can make much trouble and loss for his broker. It is by no means uncommon for a customer to abandon his broker in time of panic to bear the loss which is properly his own. Strictly speaking, the broker is simply the agent for his customer. The latter is the owner of every share of stock bought for him by the broker, although the broker is the actual holder of the stock. He holds it as security for the loan which he makes to the customer upon it. On every \$10,000 purchase the customer puts up \$1,000 cash. The broker advances the remaining \$9,000 and charges the customer interest, holding the stock as security for the loan. The customer's right in the stock, it has been legally determined, is "the right of redemption." He is entitled to receive the stock bought the moment he pays the balance due upon it. Moreover, he is entitled to all the dividends upon the stock accruing after the purchase, although the stock is in the possession of the broker, who may hold the same on the books of the company in his own name. The broker has the right to demand more margin from his customer, and if this margin is not

forthcoming, after due oral or written notice, the broker can sell the stock for the account of the customer. What is "due notice" may depend upon circumstances.

Rehypothecation.—The necessities of the stock-market require the broker to do some things which, in a strict construction of law, it might be difficult to uphold in the courts. For instance, when the broker pledges the stock he holds for his customer as security for a loan at a bank, that is rehypothecation. Moreover, it is a general principle of law that an agent employed to do a certain thing can not employ another agent to do it for him. Yet it is a common and recognized practice for brokers to employ other brokers. The man who opens an account with a broker tacitly agrees, however, to conform to the customs of the stock-market. He is willing to take advantage of the mechanism the Street has created for the transaction of its business, and must therefore not raise technical objections to its methods. Some brokers have an agreement with their customers that "accounts will be carried on margin according to the rules of the New York Stock Exchange and its members, with authority to loan or pledge the securities carried in bulk or otherwise for such sums as we may see fit."

Eliot Norton, of the New York bar, in a treatise on stock-trading from the legal standpoint, says that when a customer gives an order to a broker it is a proposition to make the broker his agent to contract to buy or to sell, according to the rules and customs of the Stock Exchange, such securities as are specified in the order.

The Big Commission Houses.—Let us now step into a broker's office and see what it looks like, and perhaps open an account. There are brokers who have only one customer or two, although the business of these two may be large enough to occupy his entire energies. There was a time not so many years ago when a customer who

carried a line of thirty thousand shares would be the talk of the Street, but in recent years operations have expanded, and a line of one hundred thousand, and even one hundred and fifty thousand shares a day, has been not uncommon. There are brokers with small offices and only two or three clerks, and others who hire only desk room and clear their business through other members; but the office into which the reader is conducted is one of the larger commission houses, that carry several hundreds of accounts, and lease private telegraph wires connecting with branch offices uptown and in other cities. These houses transact a general banking as well as brokerage business. They receive deposits of money, and make loans as well as buy and sell securities. They have two or three Board members, and in addition often employ other brokers. They may have representatives on the Cotton, Produce, and Coffee Exchanges, and buy and sell wheat, corn, cotton, and coffee on margins and for commissions the same as they do stocks. They employ a large staff of clerks, and their annual expenses range from \$60,000 to \$150,000 and even more.

As we enter the extensive offices of one of these large houses we are confronted with an arrangement of glass or wood partitions and windows, very much like a bank. Here are windows marked "Cashier," "Deliveries," "Comparisons," "Telegrams," and the like, and, looking through or over the partitions, we see bookkeepers and clerks at work. The main principles of bookkeeping are the same in any business, but a broker's office requires a line of books and blanks peculiar to its special needs.

Here at one side is a door marked "Customers," and through this we enter a large apartment resembling the library of a private residence more than a business office. The floor is carpeted. On the walls hang oil-paintings or interesting engravings and etchings. There are up-

holstered chairs and couches. There are costly Oriental rugs. There are desks with writing material, tables on which are found news slips and the latest financial journals, a rack containing files of the *Journal of Commerce* and other daily newspapers, a bookcase holding bound volumes of the *Financial Chronicle*, copies of "Poor's Manual" for a series of years, and other books of reference. On one side are private offices of members of the firm. On the other, reaching across the wall, is a board containing movable blocks of figures with which boys are posting the quotations of stocks, grain, and cotton as fast as they come out over the tickers. Groups of customers sit in the chairs, their eyes intent on the board, where they are able to see at a glance the ever-changing position of the great market. It is like looking through a huge kaleidoscope, such is the constant movement of prices. Not all the large offices have this arrangement of quotation boards, but many of them do. The tickers, of course, are indispensable adjuncts of every office.

As we enter this place we are conscious at once of a strange environment. If we have never before been in the speculative arena, it is as if we had suddenly entered into a new country. Here is a babel of voices; we hear, but understand not. The language seems to be English, but we might as well be listening to Chinese. It will be some time before we thoroughly comprehend the argot of the broker's office.

We will suppose that we have entered this office not merely from curiosity. We have heard the stories of marvelous gains achieved in the stock-market, and we are moved to make an investment. So we ask to see a member of the firm. The office partner greets us. The typical broker is courteous in his manner, but quick and terse in his language, sharp in the glance with which he

comprehends us, and giving the impression of intense nervous force. We tell him that we wish to open an account, and ask his terms and advice.

Introduction.—Now, no one can make a deposit at a bank without a reference, and no one can open an account with a broker without an introduction, or some description of oneself that will take the place of a personal introduction. Name, address, and business must be made known. The broker must be satisfied as to the customer's standing before he will accept his business. In this case we say that we keep a deposit at such and such a bank, and refer to its President or Cashier. No better reference could be given. The broker may now acquaint us with the rule of the Exchange governing commissions, and the custom of the Street as to margins and hypothecations of securities. He takes our signature and we make a deposit varying with the size of the order we intend to give and the kind of security we purpose to deal in. Having complied with the terms of the broker, we are fairly launched on the sea of speculation, or, as one Wall Street man naïvely says, "fairly engaged in the business of losing money."

Brokers' Advice.—Most men enter Wall Street with a predetermined idea of what they want to do. They have some tip or information in regard to some particular stock or some theory as to the movement of prices. In fact, many outsiders disregard their brokers' advice altogether, and generally suffer by so doing. But let it be understood that we are a "lamb" or a novice, in ignorance of the market, and that we place ourselves unreservedly in the broker's hands. We ask him to take our money and invest it for us. He flatly refuses. "We take no discretionary orders," he says. A discretionary order is one in which the broker is given authority to buy or sell whatever stock he pleases at any price, the

customer relying on his honor and judgment to yield him a profit. Discretionary orders and pools are common enough in Wall Street, but few Stock Exchange houses will have anything to do with them. Disappointed in this, we now ask for advice.

No two brokers adopt exactly the same policy in regard to advising customers. Some are very conservative about doing so. Others give advice freely. In this case the broker says something like this: "The Air Line stock looks cheap; it has paid 5 per cent. now for two years, and its statements of earnings show steady gains from week to week. Its capitalization is less per mile than that of the Straight Western Line, which earns no more and yet is selling twenty points higher. It is beginning to advance on what seems to be good buying. I am advising my customers to buy."

The Order.—We are immediately consumed with an intense eagerness to buy Air Line, and although we have no idea where the Air Line is, we say that we will take two hundred shares. The broker then directs us to fill out an order blank as follows:

NEW YORK, *March 1.*

RICHARD ROE & COMPANY, Bankers:

Buy for my account and risk 200 Air Line at 103.

JOHN DOE.

This order is immediately telephoned to the Exchange, where the Board member proceeds to execute it. In the meantime we take our seat among the other customers, and finding Air Line on the quotation board, anxiously watch the movement of its price.

As soon as the broker has bought the stock he serves us with a notice like this:

NEW YORK, *March 1.*

JOHN DOE, Esq.,

SIR: We have bought for your account and risk 200 Air Line at 103.

RICHARD ROE & COMPANY.

The name of the broker from whom the stock is purchased is also generally given.

In three or four days, it may be, we are delighted to see the stock quoted at 108, when the broker calls us to him and suggests the propriety of our taking the present profit and selling. "Money is getting tighter," he says; "the bank statement to-morrow is likely to be bad. The market looks top-heavy. Your stock is comparatively low, but it will be affected by the general decline. I advise a sale." So we write another order to sell the two hundred shares at market price, and presently are informed that they have been sold at 107½. It may be said here that in giving orders to buy or sell, if no price is named, it is always understood to be at "the market."

Statement of Account.—We now ask for a statement of our account, and find that the transaction stands like this: two hundred shares at 103 cost \$20,600. The broker obliged us to deposit 10 per cent. margin, or \$2,060. Then in four days we sell at 107½, or \$21,500. Our profit is \$900 on an investment of \$2,060, or nearly 44 per cent. But from this the broker will deduct his commission of \$25 on the purchase and \$25 on the sale, and will charge us the prevailing rate of interest on \$20,600 for the four days he carries the two hundred shares for us, allowing us, however, interest on the amount of our deposit of \$2,060.

Frequently an operator, in order to limit the amount of possible loss, will, in giving an order to buy, say at 110, specify that in case the price drops, say to 106, the broker shall sell without further delay. This is what is called a "stop order." Bear operators sometimes raid the market—that is, sell it freely—in order to depress prices to a point where stop orders will be reached. This will force liquidation, and the bears are then able to cover their sales at a profit.

Margins.—The amount of margins demanded by a broker depends on the character of the security traded in. An active stock that has a ready market is safe to carry on ten points margin—that is to say, at 10 per cent. of the market price—while one that has little or no market is unsafe to carry on twenty-five points margin. There are brokers who, in their eagerness to get business, will take large risks by carrying stocks on slender margin, but a well-conducted office will thoroughly safeguard itself by demanding a sufficient margin in every case. If after buying a stock its price declines, the broker will call for more margin.

The question has often been raised whether brokers should not be compelled to require more margins. It is a difficult question, for there is much to be said on both sides. Undoubtedly if the average commission charged were raised from ten to twenty per cent. a large amount of small and irresponsible speculation (bordering close upon gambling) would be cut off, for many who could afford to put up 10 per cent. would be powerless to supply 20 per cent. This would reduce the volume of speculation, and to that degree would decrease the power of the stock-market to distribute quickly the securities of the country. But on the other hand, there would be far less of that demoralization which now results at times from the entrance into Wall Street speculation of a crowd of men unequal, by reason of lack of capital and experience, to the task of intelligent trading.

Interest Charged.—In calculating the interest charged a customer, the broker usually averages what he pays for his time and call loans, and adds a trifle for trouble and office expenses. If the customer believes that prices will decline, he will sell short in order to reap a profit by buying at lower quotations. Then the broker borrows the stock for him from some other broker who is carrying

it. In this case the customer saves the interest that attaches to a transaction on the long side, for the broker lending a stock receives full market value for it, and pays interest on the sum thus received at a rate usually lower than the bank rate. It is only when there is a short supply of stock that a premium has to be paid to secure enough to cover short sales.

The established brokers' commissions for round trades, that is to say for both buying and then selling, are: \$25 per one hundred shares of stock; \$6.25 per five thousand bushels of grain; \$10 per one hundred bales of cotton; and \$20 for two hundred and fifty bags of coffee. For transactions one way the commissions are, of course, one-half the sum. The margins usually demanded on grain are \$250 per five thousand bushels; on cotton, \$100 per one hundred bales: and on coffee, \$325 per two hundred and fifty bags.

The Customer's Control.—A customer has full control over his account at all times, provided he keeps his margins good, and it is a custom for the broker to notify him when the margin becomes insufficient by reason of the movement in prices. The customer gives the order to buy and the order to sell. The broker merely acts as his agent. But the broker is bound to protect himself. On days of sudden panic, when the banks call in their loans, and prices fall five, ten, and twenty and sometimes even thirty points in a few hours, it may be impossible to reach the customer, or the customer may purposely keep out of the way. Then the broker may throw the customer's stock on the market for what it will bring. If he does not, it is because he feels sure of his customer, or has no time in the excitement to clear out all of the accounts, or believes that the panic will soon run its course and prices return to a normal basis. Many disputes arise over the disposition of accounts on a day of

panic, and every such day is generally followed by a crop of lawsuits between brokers and customers.* An operator who deliberately "lays down on his broker"—that is, lets his broker carry the burden and loss of his transactions in time of panic, and fails to make good his differences—may find all doors closed against him when he seeks again to speculate.

Customers may call for statements of their accounts at any time. They are usually rendered once a month, and always when an account is closed. Some customers prefer not to have frequent statements in order to avoid compounding interest. A broker's statement is a simple matter of bookkeeping, similar to a bill or statement that is rendered by a merchant for merchandise. Brokers, however, affect different stationery as best suits their ideas. The accompanying folder is a specimen statement.

This statement shows that John Doe has bought and sold 100 shares of Atchison at a profit of \$850, less commission, interest, and tax; and has bought and is still carrying 100 shares of Chesapeake & Ohio, and 200 shares of Reading first preferred.

* Justice Day of the United States Supreme Court has rendered a decision in which he held that the broker was but an agent and was bound to follow the directions of his principal or give notice that he declined the agency. The dividends on the stocks and the profits or losses belonged to the customer, who alone took the risk of the venture.

To the contention that the usual conditions did not exist because the broker was not obliged to return the very stocks pledged, which showed only a proprietary interest, Justice Day said that it lost sight of the fact that the certificate of shares of stock was not the property itself, being but an evidence of property in the shares. The certificate, as the term applied, merely certified the ownership of the property and rights in the corporation represented by the number of shares named. A certificate of the same number of shares, although printed on different paper and bearing a different number, represented precisely the same kind and value of property as did another certificate for a like number of shares of stock in the same corporation, and it was a misconception of the nature of a certificate to say that a return of a different certificate or the right to substitute one certificate for another was a material change in the property right held by the broker for the customer.

EXAMINE AND REPORT.

New York, May 13, 1901

at current with Richard Roe & Co., 15 Wall Street, Cr.

According to the rules and customs of the New York Stock Exchange and its members,
securities carried in bulk or otherwise for such sums as we see fit.

INTEREST.		DATE.			AMOUNT.		DAYS.		INTEREST.	
		April	29	By Cash		500		14		1 16
15	62		30	" 30 NYC + SL 35	1	045	65	13		2 25
		May	3	" 100 Atchison 80 1/2	8	035	50	10	13	38
15	13		13	Bal. Int					13	96
			"	Balance	10	620	56			
30	75				20	201	71		30	75
Internal-Revenue taxes are charged as follows on all sales: Two cents per share on stocks; one cent for each \$100 on products.*										

statement rendered to customer.

* This tax has since been repealed.

Speculating Brokers.—It has been said that there is a class of brokers who, while acting as agents for customers, also speculate on their own account, and that others prohibit all speculations by partners and clerks and confine themselves strictly to a commission basis. It would be of interest to know exactly how many members of the Exchange really resist the temptation to speculate on their own account, but of course it is impossible to find out. In a market report in a newspaper of 1835 the writer says: "One of the evil practices of the brokers is that of privately dealing in stocks as principals while they pass generally for mere agents in the Street. This practice is not permitted in the London Stock Exchange. Wood & Bogart stick to the legitimate business of executing the orders of their customers, without speculating privately on their own account." The same writer intimates that some of the brokers then did what would now be called "bucket-shopping" their orders—that is to say, not actually executing them, but paying or receiving the differences in prices after a customer has closed his account. This is gambling pure and simple, an illegitimate practice carried on extensively by persons outside of the Exchange, but sternly prohibited to members, and it is in many States prohibited by law. Operators who wish to make certain that brokers are not bucket-shopping their orders can demand, as they have the right to do, to be supplied with the name of the broker on the other side of every transaction. In order to avoid the appearance as well as the reality of bucket-shopping orders, the Governing Committee of the Exchange has made a rule that where brokers have orders to buy and orders to sell the same security, they must offer the security at one-eighth per cent. higher than their bids before making transactions with themselves.

The stock-broker usually arrives at his office before the opening of the Exchange, in time to consult the London prices, confer with his partners as to the day's policy, and perhaps wire a dispatch of information and advice to branch offices. His day's routine then depends on whether he remains in the office or represents the firm on the floor of the Exchange. In either case he is fully occupied until after three o'clock, for besides executing orders for his customers he has to arrange for carrying the securities by loans at the bank, and look after the many details of a complicated business. After the close of the Exchange many brokers write, or have written for them, what are called "market letters," which are more or less elaborate reviews of the market with opinions as to the future of prices. These are manifolded or printed and mailed to customers. By four o'clock, and perhaps earlier, the broker is able to leave the Street for his home or club. His hours are short, but exceedingly busy. His clerks follow him as soon as their daily tasks are finished, and by six o'clock the financial district is deserted by all save the janitors and their families. Silence reigns in the streets recently so thronged and busy, and the only sounds heard are of girls jumping their ropes and boys playing ball. But in times of stress and trouble the brokers' offices may be kept open until midnight, while clerks pore over the books and anxious partners arrange their affairs for the next day.

Note.—An article by Eliot Norton in the *Annals of the American Academy of Political and Social Science*, May, 1910, may be consulted by those who wish to obtain a view of the legal relations between a broker and his client in the purchase or sale of securities. The following is a brief extract:

Of the Carrying Out of the Order.—The relation between the

customer and the stock-broker created by the usual engagement being that of principal and agent, the principles of the law of agency govern its carrying out. If in any case the stock-broker carries out the order according to the intent of the customer, the customer is bound. This is the meaning of the stock-broker having authority. If, on the other hand, the stock-broker fails to carry out the order according to the customer's intention, the customer is not bound. In such a case he is not required to take any steps to assert this. On the other hand, if he chooses to, he can ratify what has been done contrary to his intention. Ratification rests on the consent of the customer to be bound. Therefore he should, as a matter of precaution, repudiate anything done contrary to his intention, in order that his silence may not be taken and used as evidence of consent.

Another principle of the law of agency is that the law requires of one who undertakes an agency that he should exercise due care in and about what he is entrusted to do, and to act in good faith toward his principal. If he fails in either direction he will be liable in damages.

The degree of care which a stock-broker must show is to be measured by the standard of care which a faithful and intelligent stock-broker thoroughly versed in his business would show. It is not to be measured by the degree of care which one not a stock-broker would show, or by that degree of care which is customary, or which stock-brokers usually give, unless such degree of care is that which an intelligent, faithful and competent stock-broker would show.

The duty of showing good faith is very stringently enforced. In doing so judges incline to lay down general rules of conduct rather than to decide each case on its merits. Thus the rule is established and enforced without exception that a stock-broker cannot sell to or buy from himself, or his clerk, or a firm of which he is a member, and this without proof of fraud, and even in case where the price obtained for or given by the customer is as good or better than would otherwise have been obtained or paid. There is no established custom which would justify stock-brokers in violating this rule of law. These are the main principles of the law of agency which govern the carrying out of an order.

How, now, as a matter of *fact*, does a stock-broker carry out an order interpreted according to the customs, technical mean-

ings and technical words already stated? He is authorized first to contract. This authority is qualified by two customs. Before stating them it is necessary that the "execution" of an order consists only of *the contracting* to buy or to sell the securities ordered upon the terms of the order, and an order is said to be "executed" when this is done. In other words, the "execution" of an order is the carrying out of the authority to contract. The two customs are:

1. An order in the regular form to buy or to sell securities can only be "executed," if at all, on the day it is given, unless it is expressly stated in the order that it is "good" for a longer period of time or for some particular period of time.

2. There is implied as a term or condition of an order in the regular form that the stock-broker shall try to "execute" the order as early in the time for which it is "good" as it is possible for him to do in accordance with the rules and customs of the stock exchange to which he belongs.

These two customs are so well established that a customer would probably be held bound by them, even though nothing was said about them at the time the order was given; and hence, if he does not wish them to apply to an order, he must say so clearly to the stock-broker. Assuming they do apply, the stock-broker's first step after taking an order is to try to execute it at the earliest possible moment in the time it is good for. If he neglects this duty he will be liable in damages.

REFERENCES

- "Treatise on the Law of Stock-Brokers and Stock Exchanges," John R. Dos Passos, 1905.
- "On Buying and Selling Securities through a Stock-broker," Eliot Norton, 1896.
- "A Simple Purchase and Sale through a Stock-broker," Eliot Norton, "Harvard Review" VIII, No. 8.
- "Stock-brokers' Accounts," Callaway.
- "How to Deal with Your Broker," Warren.

CHAPTER XVI

THE LANGUAGE OF WALL STREET

The language of Wall Street is especially full and rich. It has in addition to many technical words an argot of slang, often very expressive of the meaning to be conveyed, but sometimes puzzling to the uninitiated. So many are its technical and slang terms that glossaries have been published giving definitions. One of these contains a list of four hundred words and phrases in common use in the Street, and even this is not complete. The significance of the more important of the terms is indicated in appropriate places in the different chapters of this book as being more convenient for the reader, but it is necessary to bring some of them together so that their related meaning may be better understood and appreciated.

Many of the terms employed in Wall Street are likewise used in other branches of business, as for instance: money, the medium of exchange and the measure of value; credit, by which something of value is transferred to another on a promise of future payment; exchanges, which are the volume of the things of value or the representative of the things of value exchanged; the market, the convenient place where these exchanges can be made; the Exchange, an association for the purpose of providing a regulated market, and it is also the building in which the market is located. Exchange is also a term used to denote the system by which commodities, or other things of value, are exchanged between distant localities by the use of bills, checks and drafts; foreign exchange, denoting that sys-

tem as applied to international commerce and domestic exchange as applied to inland or domestic commerce. In Wall Street, however, these and other like terms are used with a precision which is usually lacking in other than great money centers.

Persons.—Wall Street employs many terms to describe the different persons engaged in the stock and money markets, in speculation and investment. Thus there are bankers, brokers, principals, investors, speculators, operators, professionals, manipulators, lambs, the public, insiders, outsiders, bulls, bears, plungers, scalpers, room traders, specialists, cliques, combines, pools, and syndicates.

Market.—Other terms apply to the character of the stock-market. This market, we are told, is either strong or weak, firm, steady or soft, rigged or stagnant, active or inactive, in a flurry or panic or boom. Prices rise and fall, advance and decline, rally, recover, react, drop, and slump. They advance and decline by points. A stock is cornered, pegged, manipulated, pyramided, or ballooned.

Position.—Other terms describe the position of different classes of persons in the market. Bulls and bears are either long or short. They have straddled or hedged. They have loaded or covered or realized, as the case may be. They have taken a flier or have been frozen or wiped out. Shorts may be squeezed. The lambs may be sheared. The bears may make a drive or they may be gunning a stock. Insiders may be planning a deal. The broker may be kite-flying. The speculator may have bought a put or call or spread. The banker may make a specialty of arbitrage business. The customer may give a stop order. He may have coppered a tip. The pool may be selling out. The syndicate may be washing sales by matched orders

through curb brokers in order to market watered stock.

Routine.—Other terms apply to the routine of the broker and the various tools he employs. He executes an order. He demands more margin from his customer. He makes out a comparison or exchange slip and makes delivery. He clears his stock. He hypothecates his security. He keeps his balance good at the bank. He gets his checks certified. He carries his securities on loans. He renders a statement. He consults the tape and the news slips and the bank statement. He will not bucket-shop his business or accept discretionary orders. He will not split his commissions. If he suspends, he is sold out under the rule.

Something must be said in further explanation of these terms. The terms, speculator and operator, are practically synonymous, except that operator generally applies to a professional. A professional may or may not be a manipulator, but a manipulator is always a professional. The customer is the broker's principal. The broker is his customer's agent. Lambs are always outsiders, but not all outsiders are lambs. Public is a collective term for outsiders who do not speculate as a regular business, but enter the market in large numbers in bull movements, and remain out of it in times of stagnation or weakness. Bulls are always long of stock. When they sell they realize or liquidate. Bears are always short in the market, and they realize their profits by covering. Scalpers are room traders who buy and sell stocks on the narrowest profit, the difference in their favor being not more than $\frac{1}{8}$ or $\frac{1}{4}$ of 1 per cent. A tip is coppered by acting contrary to the information it conveys. A pool is a combination of operators who make a common contribution for the purchase of a stock or stocks and divide the profits, if any. A blind pool is one in which all the members are kept in ignorance of

its operations, except the one who manages it. A deal is the operation resulting from a secret combination or agreement among Wall Street men to effect a certain purpose, generally of a manipulated character in the market. A corner is the consequence of bears selling more stock than is issued or than can be purchased in the market, so that they can not make delivery and are obliged to settle at high figures involving heavy losses.

A market is steady when it holds its own. It is firm when it advances, and is strong when the gains are large. It is soft when it inclines to fall, and is weak when it declines. It is inactive when the sales are decreasing, and stagnant when the volume of trading is very small. Flurries and slumps are severe breaks in prices, that do not reach the dimensions of a panic. A market is rigged when it is manipulated. It reacts from an advance. It rallies or recovers from a decline. A point is 1 per cent. A stock is pegged when its price is held at a certain figure so that it can not decline.

Kite-flying is the act of unduly extending one's credit, and the term generally conveys the idea of a criminal transaction like the issue of fictitious or fraudulent paper.

Pyramiding is only possible in a bull market. A man on a slender margin buys a few shares of stock, and as the price advances uses his profit to buy more and still more, until on the original investment of a few dollars he has a paper profit, it may be, of thousands of dollars. Thus, stories are told of men who on an original purchase of fifty shares realized profits of \$200,000. Usually, however, these inverted pyramids are overturned by some sudden reaction in the market before the speculator is content to turn his paper profits into cash.

A ballooned stock is one whose market price has been unduly inflated by manipulation.

An operator has straddled the market when he has got on both sides of it at once, the same as a gambler hedges his bet. He is taking a flier when he buys or sells for a quick turn. He guns a stock or makes a drive when he tries to break its price so as to compel the longs to unload. Shearing the lambs is the Wall Street method of relieving novices of the money they have invested in speculation. The margins being exhausted, the lambs return to the slow but sure profits of their regular avocations. Wash sales are fictitious sales for the purpose of making fictitious prices.

Puts, calls, and spreads are what are called privileges; they are essentially bets on prices. When one buys a put he is practically betting that the price of a certain stock will decline. Some operators much prefer to buy puts than to sell short. When one buys a call he bets the price will advance. While the put or call specifies the number of shares to be delivered or called, there is no actual transfer of stock on them. A put is a privilege to deliver within a certain specified period a specified number of shares at a specified price. If the market declines, the holder of the put has a chance to buy the stock and deliver at the higher price named in the put, but as a matter of fact the transaction is closed by the payment of the difference in the prices. A call is the reverse of this operation. In this case the holder of the privilege can call on the person issuing it for a specified number of shares. If the market price has advanced above the price named in the call there is a profit. A spread is a combination of put and call. The holder has a privilege to deliver at one price or to call at another. For these privileges the buyer pays a sum varying with the time, amount, and price named in the paper. If the market fails to move as he expects, the buyer of the privilege is out of pocket the amount he has paid for it.

Classes of Stocks.—Wall Street has a variety of words that describe certain stocks or classes of stocks. Thus there are industrial, franchise, traction, granger, and coal stocks. The “Big Four” is the stock of the Cleveland, Cincinnati, Chicago & St. Louis. The “Nickel Plate” is the New York, Chicago & St. Louis Railroad. The “Pan-Handle” is the Pittsburg, Cincinnati, Chicago St. Louis Railroad. The “Monon” is the Chicago, Indianapolis & Louisville Railroad. When the Wall Street man speaks of “Sugar,” he generally means not the raw nor the refined product, but the stock of the American Sugar Refineries Company. When he speaks of St. Paul, he refers not to the great Apostle or the city of that name, but to the stock of the Chicago, Milwaukee & St. Paul Railroad.

When a railroad stops paying dividends, it “passes its dividend.” When the books of a company have closed for the payment of a dividend, the stock sells ex-dividend—that is to say, the purchaser does not receive the dividend. A stock sells at par when its quotation is 100. It is above or below par by as much as it sells above or below 100. Carrying charges are the cost of carrying stocks bought on margin—that is, the interest paid to the broker on the amount he advances. Rights are frequently dealt in on the stock-market. When a company issues new stock it generally gives its stockholders the right to subscribe at a figure considerably lower than the market price. Rights are therefore valuable and are bought and sold like stock. The terms flat and premium are used in the operation of borrowing stock as well as in other ways. If there are many borrowers, the competition will lead them to give full value for the stock without interest; that is “flat.” Or if there is a great scarcity of stock the borrowing demand establishes a premium for it. If more than par is bid

for a new issue of bonds, it is said that the premium is so much. If the country has suspended gold payments, gold then commands a premium over currency.

Communities of Interests.—A term that has come into common use in Wall Street is “communities of interests.” This term is the legitimate offspring of the “gentlemen’s agreement,” which died and was buried long ago. The gentlemen’s agreement was understood to be an agreement between railroad magnates not to cut rates or resort to other practices resulting in wasteful competition. Gentlemen’s agreements, however, were generally broken. Communities of interests are more substantial and likely to be more enduring. They consist in bringing about such relations between great moneyed powers, that the interests of one are interlaced with the interests of the others, so that they shall be directed under a common policy and for a common end. There is still a degree of competition, but extreme competition ceases.

There are a number of terms used in the London market that are never heard of in Wall Street, as, for instance, *contango* and *backwardation*, which refer to the charges for carrying stocks to settlement day. *Jobbers* is also a London term. There are no jobbers in Wall Street, but *stock-jobbing* is a term in frequent use to describe the operation of buying and selling stocks for speculation accompanied by intrigue or manipulation.

Origin of Terms.—Many of the terms of the stock-market are as old as stock speculation itself. The two main divisions of the market have been known as *bulls* and *bears* for more than two centuries. There have been many conjectures as to the origin of these terms. As a bull lifts and throws an object up with its horns, that may be the reason of his selection as a type of speculators who buy for an uplift of prices. As a bear seeks

to depress prices, his name may be derived from the verb to bear, meaning to press heavily upon. By some it is held to be derived from the adjective bare, because the bear having sold short is bare of the stock. But a century ago the Wall Street bear was described as being like the hunter who sells a bear's skin before he has succeeded in shooting the bear, and that is about as complete a description as could be given.

The argot of the stock-market has now become a recognized part of the language of commerce, and many of the terms are included in the later dictionaries.

REFERENCES

"Financial Directory." Howard Irving Smith, 1908.

CHAPTER XVII

READING THE MARKET

More and more the requirements of business success call not only for special training in the technique of a trade or art, but also for an understanding of the principles which underlie it. The merchant, the banker and the Wall Street man of to-day, need to know something of political economy. A knowledge of theory is necessary as well as an expertness in practice. The notable success of the Germans* in industry, banking and the export trade is due very largely to the training they obtain in the admirable commercial schools of that country, and it is recognition of that fact which has caused the Chambers of Commerce of London, New York and Boston to take up the question of business education in a practical way, for the purpose of increasing the

* In Germany, business means something more than buying hats cheap and selling them dearly, something more than mere money-making. The head of a great industrial undertaking is a scientist in the true sense of the word. He is as far removed from the thought of making money, simply for the sake of money, as a civil engineer is removed from the thought of making profit out of a bridge which he is commissioned to design. It is the science of the thing that counts in Germany, the way in which a particular commercial problem is to be solved. Conduct your business, however small, scientifically, says the German, and the money will take care of itself.

It would be absurd to attribute to the remarkable commercial high schools and academies of Germany, all the credit for the success of the German business man; but the part that they play in commercial life is anything but small. They teach the technique of commerce, the economic relations of one industry to another, the significance of modern banks and railroads, and above all they teach the attitude which the business man must assume toward the State, the world, and his immediate competitors in business.

WALDEMAR KAEMPFERT in "Scientific American."

number and of raising the standards of schools of commercial education. A notable advance along this line has indeed been made in this country during the last twenty years. We have a number of high class commercial schools, and they are excellent and progressive institutions. But the object is not only to establish more professional schools devoted especially to finance and commerce, and to bring them into closer touch with business men, but to adapt the whole educational system of the country more and more to the requirements of modern commerce and industry.

So wide is the scope of Wall Street that any success there, which is not to be solely the result of mere chance, calls for a knowledge of economics, of geography, of politics and government, of accounting and to some extent even of science and philosophy. Therefore the educated man has the advantage there as well as everywhere else.*

Every speculator, every large investor, every man engaged in big business even though he never buys or sells stocks, should know how to "read the market," which means

a.—Reading "the signs of the times" in all parts of the world; and

b.—Reading the special conditions of the local situation.

* In all its aspects, business is becoming more and more a specialized profession, and our colleges and schools should so change their methods and courses that, breaking away from wornout traditions, they may fit the individual who seeks to be a power in the commercial world for its real problems. This does not call for any lowering of standards, but for such a change in methods as shall make education the effective handmaiden of modern commerce. I believe that the future prosperity and progress of this country will depend more and more upon the right kind of training being imparted to the great body of coming business men, who go to make up our business communities.

JAMES G. CANNON.

Reading the "Tape."—Reading the market means something more than reading the stock tape; though there are Wall Street men who become so expert in reading the tape that the varying and rapid changes in prices there recorded mean much more to them than to others, and they become so sensitive to the tape as to be able intuitively to feel what is going to happen before it takes place. But these men, so sensitive to market changes of an hour or a day, may be entirely lacking in ability to grasp the complicated and world-wide conditions which combine to make a business situation of a year or five years. The man who tests everything by the tape is one who examines phenomena through a microscope; while one who investigates international economic and political conditions is like one who looks through a telescope.

The business man, and especially one whose interests are affected by the security markets, must of necessity have a wide vision, for the cable, the telegraph, the railroad and the ocean steamer have brought the uttermost parts of the world so close together, that the state of the market in New York may depend upon an event in Africa, a famine in India, a revolution in China, a short crop in Argentina, a speech in the English Parliament, a murder trial in Los Angeles, an editorial in a weekly paper in Philadelphia, or an election in Canada.

Any one engaged in business, therefore, whether in Wall Street or out of it, but especially if he is engaged in the stock-market, must understand how to read the signs of the times, and after bringing together the various facts obtained from every part of the earth, be able to form a fairly accurate judgment as to the course of the markets. In so far as he is able to do this, he is able to reduce the risks of business; in so far as he fails, he is dependent upon chance like a mere gambler.

The main difference between the big man and the small man in affairs to-day, is not alone in the amount of capital and credit which they control, but in their ability to read the market. Even the big man, with all his range of information, can sometimes see but a little way into the future, but he can see further than the man small in information and small in ability to understand the information which he may possess.

Agencies of Publicity.—Fortunately for the common man, and indeed for the whole world of commerce, modern agencies of publicity now make it possible for any one to obtain the main facts upon which to base a reading of the business situation. Publicity thus has a two-fold advantage, namely, that it renders manipulation more difficult, and at the same time gives to the ordinary individual at least some of the advantages formerly possessed only by those of extraordinary means. Publicity is the first safeguard of Democracy, and this applies alike in business and in government.

The modern business man must know what is going on in the world, and this is true not alone as to events in commerce, though that is of prime importance to him, but also to events in politics, events in science and even events in literature, because the publication of a new book may possibly affect profoundly the progress of civilization. He can hardly be taught how to combine the information he obtains so as to enable his mind to form accurate judgments. That he must learn for himself through experience. The principal sources from which he may obtain information upon which to form judgments may, however, be stated. These sources include:

The Newspaper.—The modern daily newspaper, which has developed news-gathering into a high degree of ef-

iciency, may be depended upon to give the great events of the day in all departments—the mountain peaks of information.

Trade Papers.—Trade journalism has been wonderfully improved in recent years, and now in each important branch of industry, trade, and science, there are periodicals representing it with a considerable degree of authority—and these supply the business man with much detailed information which he cannot ordinarily find in the great newspapers.

Government Publications.—Government publications of our own and other countries are important sources of information. No business man, for instance, should fail to have “The Statistical Abstract of the United States” where he may readily consult it. The export merchant should be supplied with the “Consular Reports”; and all whose interests lie in the agricultural development of the country will study closely the crop reports.

Manuals.—There are, in addition, certain publications, periodical, quarterly or annual, which are standard manuals of statistical or other information that are indispensable for ready reference. Among these may be mentioned the *Financial and Commercial Chronicle*, *Poor's*, and *Moody's Manuals*, the *Stock Exchange Official Intelligence*, and other publications relating to corporate securities of all classes.

Financial Authorities.—There are also daily and weekly financial publications, such as the “news slips” described in another chapter, *The Journal of Commerce*, *The Wall Street Journal*, *The London Economist*, *The London Statist*, and others which are of high value to both investors and speculators.

From all these and other public, as well as private, sources, the intelligent business man will strive to keep

well informed in regard to the following points, all of which have a bearing upon the state of trade, the course of prices, the activity of the markets:

Politics.—(1) International:

(a) Relations of our government with any other foreign government, especially such as might produce friction leading to war or to the raising of obstacles for the interchange of business;

(b) Conflicts of arms or diplomacy, or commerce, between other nations such as would have an influence on the rates of money or the prices of securities.

(2) Domestic:

(a) The conflicts of national politics such as are liable to result in change of governmental policy, particularly as regards the tariff, the railroads, and the industrial organizations;

(b) The movements in State affairs liable to affect the laws and their enforcement, particularly as regards the franchise corporations, the banks and the insurance institutions, and as regards the laws governing the organization of companies.

Products of the Soil.—(1) Crops: When it is stated that the annual product of the farms of the United States amounts to over \$8,000,000,000 it becomes clear how basic to national prosperity is the yield of the principal crops; and cotton and wheat have a particular importance because they are great export products.

The connection between the stock-market and the productive agencies of the nation is necessarily very intimate. As the Street facilitates the movement of commerce, finances the railroads and great industrial enterprises, and furnishes the means for moving the crops to market, an upheaval in the Stock Exchange, if of sufficient magnitude, may be felt in every shop and mill and farm from the Atlantic to the Pacific. On the other

hand, depression in trade produces stagnation in speculation.

The three main sources of a nation's wealth are its mines, its agriculture, and its manufactures. The securities dealt in on the Exchange represent the mines, the crops, and the products of the factories. If the mines are prolific, the crops bountiful, and the forges ablaze by night and by day, the fact is reflected in the Stock Exchange transactions. Prices advance, sales increase, speculation is active. Wall Street therefore keeps its fingers constantly on the pulse of trade. The three principal crops are cotton, wheat, and corn. The time was when "cotton was king," and a failure in the cotton crop spelled national disaster. Even now a short cotton crop would be not only a severe blow to the South, but also inflict a loss that would be felt more or less all over the country. A failure in the corn or wheat crop has more than once been the forerunner of a commercial crisis.

Crop reports are issued regularly by the Government Department of Agriculture, and these give official information regarding the acreage and condition of the growing crops. For instance, in April an estimate is given of the average condition of winter wheat; in June estimates are given of spring and winter wheat; in July the acreage and condition of corn are disclosed; and so on through the year, each month's report giving a showing of all the principal crops of the country. Wall Street is not content to rely entirely on these official reports. Many unofficial reports are issued, some of them elaborate and reliable, being summaries of statements sent in from hundreds of correspondents in all sections of the crop area. The Government also issues monthly reports of commerce showing the value of imports and exports.

(2) Mining: Regular reports are obtainable as to the

production of coal, iron, copper, silver and gold, and all of these have important bearing upon business. To gold production has been given a special significance because of the belief of many economists (but not all) shared in by some bankers (but not a majority) that the volume of gold mined has a determining influence upon prices. The quantitative theory of money is the subject of much controversy, but whatever its real relation to prices, the output of the gold mines and particularly those of the Transvaal, from which monthly records are obtained, is watched closely by business men. Copper enters into so many modern uses, notably electrical, and there are so many important copper stocks, that the records of production and consumption are now of high importance in sizing up the business situation. The consumption of coal is of special significance to the coal stocks and of general bearing upon industrial activity.

An enormous output of gold such as followed its discovery in California, and more recently in the Klondike and the Transvaal, has been responsible for great "booms" in business and activity in speculation. Less than twenty years ago depression in the coal trade caused a severe shrinkage in the prices of the coal stocks, and the whole stock-market suffered thereby. In 1902 the market suffered from the strike in the anthracite coal region.

Industries.—The United States is in a state of rapid transition from a country that was chiefly agricultural into a country which is now as much industrial as it is agricultural. Its great industries have passed into the hands of big companies whose securities are represented in the Stock Exchanges. Thus the industrial production is important both in a commercial and a financial way. The iron and steel trade has long been considered a barometer of business activity, and the statistical reports

of production, and of "unfilled orders," and the reviews of trade conditions by the *Iron Age* and other authorities have a marked influence on the markets.

Commerce.—(1) Foreign: The volume of our foreign trade is by no means as large as our domestic trade, but it is so great as to be an ever present influence, particularly as we need a large balance of merchandise commerce in our favor because of the immense sums which we are required to pay abroad as interest on foreign investments in the United States, as payment for freights carried in foreign ships, as expenses of American tourists and in other ways. The weekly statements of foreign commerce from the Port of New York (about 48 per cent. of the whole) and the monthly statements of exports and imports issued from Washington are therefore carefully studied and analyzed.

(2) Domestic: The statistics of domestic commerce are not so comprehensive as those of foreign trade, but nevertheless there are a number of methods by which its volume may be measured, for instance:

(a.) By bank clearings. Inasmuch as 85 per cent. of all the business of the country is carried on by checks, and as the great bulk of the checks pass through the clearing houses, it follows that the transactions of the 111 clearing houses of the country furnish an admirable test of the volume of trade, and it is possible by an intelligent use of the weekly statements to learn what section of the country is doing the best or suffering the most as the case may be.

(b.) By railroad earnings: The railroads are not producers of wealth, but transporters. They connect the farm and the factory with the consumers. They carry the corn, the cotton, the iron, and the manufactured products to the markets. So statistics of the gross earnings of the railroads afford an index of trade conditions.

When, therefore, one sees a statement like this, "Railway earnings for the first week in May increased 6.02 per cent. over those of the corresponding week of last year, and 19.9 per cent. over the previous year," it is fair to assume that trade is maintaining a rapid pace. As most of Wall Street speculation is in railroad stocks, and as one-fifth of the nation's wealth is invested in railroads, it is needless to say how important from every point of view becomes the condition of these properties. Railroad reports are therefore the chief literature of Wall Street. They are studied by its experts with analytical skill. The weekly statements of gross earnings collectively show whether business has gained or lost. The monthly statements show something of the management of the railroads, as these give not only the gross receipts, but also the operating expenses and the net earnings. It may happen that while a railroad is earning more, it is also costing still more to operate it; in which case, while the gross earnings show an increase, the net earnings reveal a decrease, and it is from the net earnings that interest and dividends are paid.

(c.) By railroad cars in use: If there is a shortage of cars, it follows that the business pressing for transportation is greater than the facilities. A large surplus of idle cars means depression.

(d.) By statistics of business disasters: The monthly figures of commercial failures published by R. G. Dun & Co. and Bradstreet are very valuable indices to trade conditions. Those who have learned how to analyze them may learn much concerning present, and at least something about future, conditions. Next to the records of bank clearings they are the most important statistics.

(e.) By trade reviews: Dun's and Bradstreet's issue weekly reviews of trade from information gathered from a multitude of correspondents throughout the coun-

try and these are highly regarded as authoritative statements of industrial and mercantile conditions.

(f.) By price index numbers: Bradstreet's in this country and *The Economist* in England publish regularly price index numbers, that is to say numbers arrived at on systems which it is unnecessary to explain, but which purpose to show the movement of the prices of the leading articles entering into consumption, so that one price number stands for a multitude of prices. Just as the speculator can read much of the world's history from the stock tape, so the business man may gain much information regarding fundamental economic conditions from a study of prices of leading commodities, and the price index number is a convenient aid in this study. Prices that are very high or very low indicate an abnormal condition that spells danger of one kind or another. A rapid advance or decline in prices increasing or reducing the cost of living is of tremendous significance to all persons, especially those of fixed incomes such as wage earners and investors, and in these days of corporations a greatly increased number of persons draw fixed salaries or fixed incomes from interest on their investments. High prices for commodities usually depress the prices of those securities which bear a fixed rate of interest.*

Banking.—The condition of the principal banks as

* Viewing the subject on broad lines, and without going into a mass of detail of politico-economical nature, a hint for the practical business man is afforded by a contrast of the movements of index prices with those of Stock Exchange securities. When commodities advance prices of Stock Exchange securities recede; when commodities recede Stock Exchange securities advance. This is a general law, that is impressed by a contrast of the movement of Consols and of index prices for over 60 years. Of course, such movement now and again for a time is interfered with by political and other incidents, but, spread over an extended period, there is a general feature of simultaneous movement (say, Consols rising and commodities falling, or commodities rising, and Consols falling) which is very remarkable.—*The London Statist*.

shown by their weekly statements, especially the Banks of England, France and Germany, and the associated Clearing-House banks of New York, must be kept close track of by every man of large affairs, for as modern business is carried on by credit, and as credit is based upon gold reserves, the credit capacity of these great banks, and the amount of gold which is going into or coming out of them, either in domestic or foreign exchange operations, are of immense importance to the entire business world.

Corporation Reports.—These are most valuable, and are becoming increasingly so as the policy of corporation publicity is more extensively enforced. No economic development of the past ten years has been more important than in the application of publicity methods to the large corporations, especially as regards the fullness and clearness of their financial statements. These are at once a guarantee of good faith to the public and a safeguard to the investor.

The annual report is, or ought to be, a complete statement of the entire business of the railroad, containing a financial balance-sheet, a description of its physical condition and equipment, and detailed reports of operations in every department, showing the different sources of revenue, the amount and kind of freight carried, the number of passengers transported, the various objects of expenditure, the cost of improvements and operation, etc., the whole usually accompanied by some general account of policy by the president.

The annual reports of the St. Paul and Pennsylvania railroads, and of the United States Steel Corporation are regarded as being excellent models for fullness of information. One must know how to analyze a railroad report in order to be able to use it to the best advantage. It must be studied by comparison with preceding reports of

the same company, and with reports of other lines in the same section of the country. The object of analysis is to ascertain the true value of the securities of the company. Take, for instance, any given railroad. We ascertain, first, its mileage. In order to obtain the value of a piece of real estate as compared with another property in the same street, it is necessary to reduce both to the number of feet fronting on the street. In like manner, to compare the operations of one road with those of another of different length, it is necessary to reduce every item of income and expense to per miles. Thus we find how much the capital stock is per mile, how much the gross earnings are per mile, what are the operating expenses per mile, what the fixed charges are per mile, what the net income or surplus is per mile, and how much this surplus amounts to on the stock. We then compare this exhibit with that of other lines in the same territory, study the history of the company, and learn all we can of the character of its management. We are now prepared to form a judgment: 1. Whether the company's capital is or is not above the average issue of lines in the same territory—in other words, whether it is or is not overcapitalized. 2. Whether the gross earnings per mile compare favorably, or otherwise, with those of the other systems. 3. Whether the percentage of operating expenses indicates economical management or not. 4. Whether the fixed charges are too heavy or otherwise. 5. Whether the surplus applicable to dividends exceeds the dividends actually paid, and whether or not it is likely to increase. If the price of the stock is 170 and the dividend is 6 per cent., it yields to the holder 3.52 per cent.; but if the net income applicable to dividends amounts to 9 per cent., that means a possible yield of 5.29 per cent. on the stock at the market price. If the history of the company shows consistent, conservative, and honest man-

agement, we are, with all these facts in our possession, prepared to determine whether the market price is too low or too high. To Albert Fink, long Pool Commissioner, is due the credit of having given a scientific form to railroad reports, and the leading companies now conform more or less to his ideas. Those who wish to get a close and critical view of this scientific form should consult Thomas F. Woodlock's "Anatomy of a Railroad Report."

Technical Position.—In all important lines of business, all this information must be gathered, studied, carefully analyzed, and applied. But they are particularly essential in stock speculation, which involves larger risks in forecasting the future.

But, in addition to all this, the stock speculator must study the stock-market itself so as to inform himself as fully as he can as to its condition: whether there is an over-supply of stocks on hand ready to be sold, or a big short interest; what certain influential "interests" or heavy operators are doing; whether the supply of money for speculative purpose is, or is not, to be ample; in other words the whole technical position of the market. The following from the financial page of the *New York Sun* gives an indication of what is meant:

The week's stock-market has been of peculiar character. Many of the prominent shares, including nearly all those which are commonly called speculative leaders, wavered back and forth in an uncertain way, as if professional operators were dubious in their minds as to the exact course, marketwise, that they should pursue; and one or two of these stocks, notably Union Pacific, have been distinctly heavy. In fact, the weakness of Union Pacific has constituted the chief argument with speculators for selling stocks. No reason of any substantial importance has presented itself for a decline in this issue, and the strong probability is that the fluctuations of the stock, which have been highly irregular lately, have represented no more than the market op-

erations of two or three large capitalists who are acting upon the theory that for the time being a series of profitable turns may be made by selling the stock when it rises a few points and buying it after a similar decline.

Price Movements.—Much may also be learned to practical advantage by studying the price movements of stocks, grain, and cotton. As nature is accustomed to repeat herself, although never exactly alike, so the market is accustomed every few years to repeat former experiences, although never in precisely the same way. The student of the market may often by studying prices be able to distinguish signs of market repetition. The following is a statement by R. G. Dun & Co., of average prices of stocks during sixty years, and an inspection of this table shows how this law works:

AVERAGE QUOTATIONS OF SIXTY ACTIVE RAILWAY STOCKS

	High.	Low.		High.	Low.		High.	Low.
1911 ...	\$107.22	\$95.96	1898...	\$67.04	\$52.55	1885...	\$63.47	\$43.45
1910 ...	115.21	93.24	1897...	59.99	45.64	1884...	66.28	38.68
1909 ...	116.30	101.16	1896...	50.76	40.71	1883...	79.86	57.58
1908 ...	105.26	79.69	1895...	56.07	44.49	1882...	94.85	63.77
1907 ...	112.25	76.35	1894...	52.49	47.37	1881...	101.54	69.93
1906 ...	120.99	109.83	1893...	66.31	41.71	1880...	87.04	51.74
1905 ...	117.90	106.15	1892...	68.49	62.32	1879...	67.86	33.85
1904 ...	107.76	85.74	1891...	66.78	55.29	1878...	37.77	25.51
1903 ...	109.10	82.62	1890...	69.93	53.61	1877...	36.33	20.58
1902 ...	116.27	101.03	1889...	66.29	59.55	1876...	47.28	27.58
1901 ...	103.98	81.36	1888...	65.09	55.71	1875...	53.50	36.14
1900 ...	84.87	68.49	1887...	72.35	59.03	1874...	58.79	41.79
1899 ...	76.29	66.72	1886...	71.99	55.28	1873...	69.61	40.83

“Reading the market,” therefore, requires scientific knowledge combined with the art to apply this knowledge practically so as to achieve results.

The speculator who does all this can not justly be termed “a gambler.” He is a close and intelligent student of risks.

The following account of the year 1911 taken from “Dun’s Review” is an example of the methods used in reading the business situation:

THE YEAR'S RECORD.

	1911.	1910.
Bank Clearings	\$158,768,000,000	\$162,914,100,000
Railroad Earnings	\$2,395,800,000	\$2,423,400,000
Grain Crop (value)	\$2,702,458,000	\$2,489,000,000
Cotton Crop (bales)	14,385,000	11,609,000
Pig Iron (tons)	23,750,000	27,303,000
Exports	\$1,867,605,000	\$1,637,056,000
Imports	\$1,392,500,000	\$1,426,200,000
Commercial Defaults	\$191,061,665	\$201,757,000

The year just closed was one of reasonable activity for a year in which great economic issues were the subject of controversy at home, and a revolution in China, a war between Italy and Turkey, and a dispute over Morocco that involved France, Germany and England, combined to unsettle the international money markets. It was a year in which the inland trade in volume was of more than fair proportions and the foreign commerce notably larger than in any preceding year. Measured by bank clearings and railroad earnings, 1911 was under that of 1910, yet the reduction was so slight as to indicate no pronounced loss of ground. Business fairly held its own. The transactions were indeed of such proportions as to show that, on the whole, the American people were living well. Consumption was not equal to productive capacity and in some instances was far below it, and yet labor was well employed at good wages.

The loudest complaints come from invested capital, to the effect that existing uncertainties made it impossible to enter into large new enterprises. Nevertheless, dividend and interest payments during the year make an aggregate in excess of other years. The most notable event of 1911, from the standpoint of national welfare, was the enormous cotton crop, believed to exceed 15,000,000 bales; the beneficent effect of this can scarcely be overestimated. Already the magnitude of the crop is serving to bring about more normal conditions in the long depressed cotton goods trade, which is now manifesting many signs of revival. The grain crops did not redeem the bright promise of early sum-

mer and were reduced in quantity, but were of greater value than in 1910.

The sudden revival in the iron and steel trade in the last three months of the year overshadows in importance the preceding depression, especially as it was brought about by the significant buying of rails and equipment by leading railroads. There was also a late but pronounced improvement in copper. The foreign trade was of remarkable dimensions and especially notable for the growth of exports, due, in no small part, to the more intelligent and persistent pursuit of foreign markets by manufacturers and merchants; this contributed mightily to the strength of the United States in the international money-markets. There was a reduction in aggregate liabilities of defaulting concerns. This demonstrated that the position was sound in spite of changes brought about by new conditions. It is noteworthy that the last three months were the best of the year—a proof of improving conditions—the progressive betterment being the best promise for the new year

REFERENCES

- "How to Read the Money Article," Charles Duguid.
"The Anatomy of a Railroad Report," Thomas F. Woodlock, 1900.
"Railroad Corporations, How to Know Them," J. Shirley Eaton, 1900.

CHAPTER XVIII

THE CREDIT INSTITUTIONS AND THE CLEARING-HOUSE

Addressing an assemblage of bankers, early in 1902, Lyman J. Gage, then Secretary of the Treasury, said that the nomenclature of the Street ought to be changed; and that instead of speaking of rates for money, we should use the term "rates for credit." It has already been shown that what is called the stock-market is really an income market. In like manner what is called the money-market is in reality a credit market. As Mr. Gage shows, when rates for money are high, people become alarmed about the scarcity of money as indicated by these high rates, when substantially there has been no change in the volume of money, either in the hands of the people or in any under control of the banks. What ought to be quoted is not money, but credit. It is credit that is getting difficult, not actual money that is becoming scarce. Macleod, the English economist, also defines the money-market as a credit market, and speaks of a bank as "a manufactory of credits." The banker is a credit merchant. He buys the less known credit of other people and then sells at a higher price his own better established credit.

Credit Operations.—Wall Street is not exceptional in carrying on the vast bulk of its operations on credit. Dr. David Kinley, of the University of Illinois, estimates* that from 80 to 85 per cent. of the total business of the United States is done by the use of credit instruments—from 50 to 60 per cent. in the case of retail trade and over 90 per cent. in the case of wholesale trade. The

* See Document 399 of Monetary Commission publications.

merchant, as well as the broker, goes to the bank for credit. "Commerce," said Daniel Webster, "can not exist without credit. Credit is the vital air of the system. It has done more, a thousand times, to enrich nations than all the mines of the world." Credit makes one dollar do the work of many dollars. Some of the old prejudice against money-lenders still exists, and in certain sections of our country bankers are even now held in distrust and fear. It is the distrust and fear of ignorance.*

Value of Credit.—It has been said that the man who makes two blades of grass grow where one grew before is a benefactor of his kind. Then certainly a man who can, by the credit system, multiply the usefulness of a dollar is equally a public benefactor. Money inert, unused, is of no benefit. It is only when put in use that money becomes of value. In storage it is a burden; in action a beneficence. It is never more in action than when made the basis for credit. It is for this reason that a large surplus held by the Treasury becomes an evil. The Government, least of all, can afford to be a hoarder of money. Economists in fact hold that money itself is only a high form of credit, a bill of exchange to facilitate commerce, though we employ as the basis of all money, gold, a product of stable and constant value that is a part of the general wealth. The hoarding of money is, therefore, a contraction of credit and a blow to business activities and national prosperity.

The extent to which the banks multiply the power of money through their system of credit is shown in a striking manner by statistics gathered from the report

* Andrew Jackson in a letter confessed that he was opposed not merely to the United States bank but to all banks. His prejudice is of the same kind as exists to-day against corporations; and springs out of a failure to distinguish between beneficent use and injurious abuse.

of the Controller of the Currency. On June 30, 1910, the aggregate deposits of all the banks and trust companies in the United States amounted to \$15,283,396,254, while the actual money held was \$1,414,600,000. Thus the amount of credit held subject to demand was over ten times as great as the amount of money held in reserve. On the 30th of December, 1911, the Clearing-House of New York held deposits of \$1,723,362,000, while the amount of actual coin and legal tenders held was \$406,240,000 or about 24 per cent. of the deposits. In Great Britain the proportion of credits to cash reserve is even greater than in this country, and as credit is one of the principal elements of wealth,* this fact explains, in part, England's immense financial power.

The capitalist is a man who uses his own money and credit in the transaction of business. A banker uses his own money and credit as well as the money and credit of others intrusted to him in the transaction of business. On the one hand, there are individuals who possess money, but have no immediate business or investment in which to employ it; so they deposit it in banks for convenience, safe-keeping, and in some instances to draw interest upon it. Other individuals are in business and need money or credit to carry it on; these go to the banks and borrow it at the prevailing rate of interest. As the broker is an agent between buyers and sellers, so the banker is an agent between borrowers and lenders. In the complexity of his affairs the modern business man, however, may become at the same time both a borrower and a lender. He is constantly depositing credits in the bank, and at the same time is drawing them out in the shape of loans.

Lending of money or extending of credits, as a busi-

* If wealth consists in those things which man most desires and which possesses exchangeable value, then credit is wealth.

ness, is carried on by individuals who are known as private bankers and by corporations called banks, a name so old that there is a dispute as to its origin. The first banks served only the purpose of providing money for Government uses. Then they became depositories for safe-keeping of money, and vehicles for its transfer from one locality to another. Gradually they have assumed other functions of banking, such as the issuing, lending, and borrowing of money.

Savings Banks.—There are various kinds of banks. Savings banks receive deposits on which they pay interest, and loan money on real estate or invest in United States bonds and other safe securities under restrictions prescribed by law. They are created primarily for the philanthropic purpose of taking the small savings of working people and investing them in a way that will be safe and profitable. Security is the first great consideration in a savings institution; income comes second. There is only one savings bank in Wall Street, and as a class these institutions have no connection with the Street as a speculative center, but they figure largely in the investment market.

Commercial Banks.—Commercial banks are institutions both of deposit and discount; that is to say, they receive deposits subject to withdrawal by check and lend on securities or negotiable paper. National and State banks are of this class. But the National banks are also banks of issue or circulation. They have the right under certain restrictions to issue notes which circulate the same as Government money. These are secured by United States bonds deposited with the Treasury Department. State banks do not issue notes, as there is a prohibitory tax of 10 per cent. upon State bank circulation.

Trust Companies.—Trust companies receive and loan money like commercial banks, and can also loan on real

property. Moreover, they accept and execute trusts, acting as trustees for estates and corporations. They were formerly supposed not to do a general banking business or to allow clients to draw on their deposits by check. A few of the companies still limit their business strictly to the original plan, but nearly all of them have broadened out so as to do business the same as National and State banks, and also to underwrite securities like private bankers. They cannot, however, issue notes.

Private Bankers.—The private bankers do business much the same as incorporated banks. They receive and loan money. They act as financial agents for domestic corporations and foreign banking-houses. They underwrite new issues of securities. They issue letters of credit. They deal in foreign exchange, and most of them export and import gold when the occasion requires.

National Banks.—Of these various classes of money-lenders the most important are the National banks. A statement by the Controller of the Currency shows that on December 5, 1911, the National banks in New York City held as deposits of other banks and trust companies \$627,191,958, the amount due in individual deposits being \$686,417,818. The National banks are also depositories for a heavy amount of the Treasury surplus. Practically the cash reserves of the National banks form the basis on which rests the vast output of all credit.

Reserve Cities.—The National banking law creates what are known as Central Reserve and Reserve Cities, New York being the most important of three central reserve cities. The National banks in these cities are obliged to maintain at all times a reserve * in specie and

* The rigid reserve requirement of the National banks, while it has its advantages, has also its weakness. A money reserve like an army reserve should be held for use in an emergency. If it cannot be used in an emergency then it is worse than useless as a reserve. In actual emergencies therefore the reserve law is to a large extent

legal tenders equal to 25 per cent. of the total deposits. But they are permitted to receive as deposits, on which interest is paid, one-half of the legal reserves which National banks in the other reserve cities of the country are required to keep. The banks of these interior cities, therefore, have the advantage of earning interest on one-half of their reserves, while the New York banks have the advantage of the power which comes to them as the holders of the deposits of country banks. Country banks are allowed to deposit 60 per cent. of their reserve in reserve and central reserve cities.

Of the total specie and legal tenders held by the National banks of the United States on December 5, 1911, over 30 per cent. was on deposit in New York City. It is as a depository of reserves that Wall Street, therefore, acquires its standing as a money center; and every great nation must have such a center. Even if there were no law permitting interior banks to deposit part of their reserves in New York, they would still deposit there, for it is to the advantage of the whole country that there shall be in one place a great storehouse of reserves, large enough to finance the commerce and enterprise of the nation. Any attempt to compel by legal enactment banks to keep all their money "at home" would be contrary to the higher economic law, although it is equally true that every bank ought to keep an adequate reserve in its own vaults. In London the joint stock banks have in recent years been compelled to maintain larger individual reserves instead of keeping all their money in the Bank of England.

Money has a magnetic power, and the needle of the financial compass steadily points toward New York. But while it has this power, it also has the responsibilities suspended and the banks draw on their reserves to protect the business situation.

which attach to power; and when any section of the country is in financial need, by reason of harvested crops that must be moved to markets, or by any other cause, it is New York that must furnish most of the relief.

Growing Size of Banks.—In recent years there has been a notable expansion in the size of the money-market. Wall Street has required larger banking machinery. The formation of great syndicates and immense corporations have called for banks of larger capital and resources. Syndicates that are conducting operations involving tens and perhaps hundreds of millions of dollars require accommodations that would have seemed incredible a few years ago. So two banks have increased their capital to \$25,000,000 each, and another has increased to \$10,000,000 and has a surplus of over \$21,000,000 in addition. Others have augmented their facilities in many ways. Large State banks have established numerous branches. Several of the principal banks are allied with the most powerful private bankers and individual capitalists and corporations. Of the 66 banking institutions in the Clearing-House with a total capital and net profits of \$458,606,800 reported in the beginning of 1912, there are 9 whose capital and net profits amount to \$229,438,800. Therefore, nine institutions are as large as the remaining 57. Of the total net deposits of the Clearing-House on January 13, 1912, amounting to \$1,804,727,000, ten institutions out of 66 held \$963,872,000 or over 53 per cent.

Whether this concentration of the money power is a thing to be feared or welcomed, is a question that is scarcely germane to the purpose of this book. Every one will answer it in accordance with his own point of view. It is practically the same question that is involved in the organization of the trusts and the consolidation of the railroads. It is the same question that

is put in the chapter on the private banking houses. As is suggested there, concentration is not to be judged so much by its size as by its acts. Concentration of capital and credit is greatly to be desired when it is a power beneficently used. When it is abused it is greatly to be dreaded. But that is equally true of political power whether exercised by a despotism or a democracy. Majorities may make their power a fearful menace. The financial * concentration has, on the whole, exercised its power for the good of the country, and the kind of co-operation which it represents is something very different from "a money trust," the term which the enemies of Wall street have applied to it.

Competition.—It should be remembered that along with this growth in the size of banks, there is also an intense competition between the banks. Just as the stock-market is open at all times to anyone who may wish to enter it, so the money-market is open to all who may possess the credit to command its resources.

The Clearing-House.—Sixty-six of the National and State banks and Trust Companies of New York are members of the Bank Clearing-House,† and other banks and Trust Companies of the city, and of Hoboken and Jersey City, clear through the member banks. The Subtreasury is also a member of the Clearing-House and makes its daily exchanges there. This institution, established in

* It is by reason of financial regulation and money centralization under established laws of prudence in banking that rates of interest are lower in the city than in the country, and lowest in the most concentrated and most efficiently financed centers.

C. W. BARRON.

† The Clearing-House is an institution by which all the banks which join in it are formed, as it were, into one huge banking institution for the purpose of transferring credits from one bank to another without the use of coin, just in the same way as credits are transferred from one account to another in the same bank without the use of coin.

HENRY D. MACLEAD.

1853, and whose building in Cedar Street is one of the architectural ornaments of the city, clears the immense exchanges of New York which amount to 60 per cent. of the clearings of the United States. It performs the same office for the banks that the Stock Clearing-House does for the stock-brokers. During the fiscal year ending October 1, 1910, the exchanges of the Clearing-House banks amounted to \$102,553,959,069. It is obvious that if this stupendous sum represented actual deliveries in payment of checks and drafts, if each bank had to send to every other bank to make collections, and its messengers obliged to carry back the money due their bank, in specie or legal tenders, the business of New York would be so congested as to produce a blockade or paralysis. But by meeting in the Clearing-House and there ascertaining what each institution owes the others, and by a simple and ingenious method of clearances, establishing balances which are settled by cash payments, the immense business of the banks is conducted as easily and safely as if, instead of sixty-six banks, there was only one, and all transactions passed through its doors. It takes less than an hour to clear a day's exchanges. The \$102,000,000,000 of exchanges in 1910 were settled by payments of cash balances aggregating only \$4,195,293,966. In other words, the Clearing-House eliminated about \$98,000,000,000 that would have had to be paid in actual delivery and individual settlement of every item. The percentages of balances to clearances was only 4.09. In one year it was under 3, and the average percentage since 1854 is under 5. The exchanges of May 10, 1901, amounting to \$598,537,409, were settled by payments of balances amounting to \$23,873,115. In one day in May, 1902, the Chatham Bank settled its exchanges, amounting to \$1,323,694, by receiving a balance of ten cents.

Method of Clearing.—The method of clearing is, as has

been said, exceedingly simple. Each member bank sends to the Clearing-House every day two clerks, one of whom presents to each of the other banks in turn the checks and drafts which it holds upon it, while the other clerk receives the checks presented against it by the other banks. It ordinarily takes only a few minutes to make these exchanges, the operation moreover being facilitated by the fact that an hour earlier seven of the biggest institutions clear their mutual exchanges by themselves. As soon as the exchanges are effected it is a simple operation to ascertain which banks are creditors and which are debtors. The debtor banks have then a few hours in which to make payment of their debit balances, payment being made not to individual banks but to the Clearing-House, which distributes the amount to the institutions which are creditors. Of course, the credits and debits must exactly balance, and while a large sum of money changes hands, not a cent remains with the Clearing-House at the close of the day. Payments may be made in two ways:

- (a.) In United States money;
- (b.) In Clearing-House certificates representing deposits by member banks in the vaults of the Clearing-House of gold and legal tenders.

The manager or assistant manager of the Clearing-House presides at the daily clearings, but so simple is the system that ordinarily there is little for him to do except to maintain order and impose fines for unnecessary delays, although these and the other duties of these officials are very responsible, requiring men of the highest character and efficiency. Even in the week of the Equitable Building fire in January, 1912, when the clearances had to be carried on in the Hall of the Chamber of Commerce in Liberty Street, because access to the Clearing-House building in Cedar Street was impossible,

the exchanges were made without delay and the balances paid to the last cent.

Other Clearing-House Functions.—But the Clearing-House has more important functions than even that of providing the machinery for clearances, though that was its first duty. It assists solvent banks temporarily embarrassed and saves them from suspension. In times of imminent panic, it issues Clearing-House loan-certificates, and thus prevents what might result in a condition of general banking and commercial insolvency. The loan-certificates thus issued in times of dire emergencies are in the nature of "temporary loans made by the banks associated together as a Clearing-House Association to the members thereof, for the purpose of settling Clearing-House balances." They are a species of fiat money, circulating only at the Clearing-House, and retired as soon as the danger of panic is over. The Clearing-House establishes rates of charges for collections of out-of-town checks. It has also been more than once proposed that it should add another and still more important function, that of fixing a daily rate for call loans. A committee of bankers, it has been suggested, should be appointed to meet every day and determine what the rate of call loans should be for that day, and this rate would be binding on all the member banks and the institutions that cleared through them. The membership of this committee under such a system would be changed frequently, say once every month. The system would give the Clearing-House much of the power now exercised by the Bank of England, which, by its rate of discount, safeguards the English money-market and prevents many monetary panics. It has also been suggested that the Clearing-House should fix a common rate of interest to be paid by the New York banks on the deposits of country banks. Neither proposition has, however, been adopted, possibly

through fear that the act would be interpreted as an attempt to create a monopoly in money.

Expansion of Clearing-House.—In 1911 there was a most notable extension of the scope and effectiveness of the Clearing-House. It admitted to membership most of the trust companies of the city, under a satisfactory agreement as to the amount of reserves the trust companies should be compelled to carry in their own vaults, and the amount which could be held on deposit with member banks. The admission to the Clearing-House immensely strengthened the financial position of the whole country; and it had also the incidental and by no means inconsequential advantage of making the weekly Clearing-House bank statement more valuable by making it a more complete exhibit of banking conditions in New York. This, therefore, is a notable expansion of financial publicity.

Another great improvement in the New York Clearing-House has been the establishment of a system of examinations of member institutions and the employment of a staff of competent examiners* for this purpose. This enables the Clearing-House to keep a closer watch on its members for the common interest of all, thus affording a larger protection against unsound banking and the liability to insolvency.

Clearances in the United States.—There are 111 Clearing-Houses in the United States whose exchanges in 1911 amounted to \$159,999,959,528. Collectively they are the conservators of the credit and business of the country. They administer their supreme trust with magnificent efficiency and justice. They demonstrate the possibilities

* One chief with twelve assistants. Nearly twenty American Clearing-Houses have now adopted a system of examinations supplementary to the examinations conducted under the direction of the Comptroller of the Currency.

of intelligent and fair coöperation which is the fundamental principle of modern commerce and industry.

Plant of the Money-Market.—The Clearing-House, the banks, and the trust companies constitute what may be termed the plant of the money-market. The bank officials, the private bankers, and the money and exchange brokers are the skilled workmen who operate this plant. These brokers are men who make a business of buying and selling mercantile paper or bills of exchange, while others loan the money of the banks to members of the Stock Exchange. The plant is constantly expanding in order to provide the facilities for the expanding requirements of business. Every large bank, for instance, is divided into a number of distinct although co-related departments each under an expert manager. Thus there is a foreign exchange department and usually a bond department. One of the big New York banks in 1911 handled \$550,000,000 of bonds.

REFERENCES

- A bibliography of all books published on money, currency and banking would itself make a book. Charles A. Conant, in a bibliography of one hundred and three works, names the following sixteen publications as furnishing "a satisfactory beginning toward a library for a student of money and banking":
- "The Canadian Banking System," R. M. Breckenridge, 1894.
 - "The Evolution of Modern Money," W. W. Carlile, 1901.
 - "The A. B. C. of the Foreign Exchanges," George Clare, 1896.
 - "Traite Theorique et Pratique des Operations de Banque," J. G. Courcelle-Senevid, 1876.
 - "Bimetallism," Leonard Darwin, 1898.
 - "Chapters on the Theory and History of Banking," Charles F. Dunbar, 1897.
 - "La Liberté des Banques," J. E. Horn, 1866.
 - "Money and the Mechanism of Exchange," W. Stanley Jevons, 1893.
 - "A Study of the Theory of the Medium of Exchange," David Kinley, 1904.

- "La Monnaie dans l'Antique," Francois Lenormant, 1878.
- "History of the Greenbacks," Wesley C. Mitchell, 1903.
- "The Work of Wall Street," Sereno S. Pratt.
- Report of the Monetary Commission of the Indianapolis Convention, 1898.
- "Money," Francis A. Walker, 1886.
- "Fundamental Problem in Monetary Science," C. M. Walsh, 1901.
- "Money and Banking," Horace White, 1902.
- To this list should be added Mr. Conant's own admirable works:
- "Principles of Money and Bank," 1905; and
- "Modern Banks of Issue."
- The following books should also be consulted:
- "Lombard Street," Walter Bagehot, 1873.
- "Clearing Houses, Their History, Methods and Administration," James G. Cannon, 1910.
- "Credit and Its Uses," William A. Prendergast, 1910.
- "The Banks of New York," T. S. Gibbins, 1859.
- "History of Banking in Great Britain," Henry D. Macleod, 1896.
- "Monetary Systems of the World," Maurice L. Muhleman.
- Publications of the National Monetary Commission, 1910-1911.
- "Funds and Their Uses," F. A. Cleveland, 1902.
- "The Modern Bank," A. K. Fiske, 1904.
- "Investigations in Currency and Finance," W. Stanley Jevons, 1884.
- "The Bank and the Treasury," F. A. Cleveland, 1905.
- "Money and Banking," Earl Dean Howard and Joseph French Johnson, 1910.

CHAPTER XIX

THE USE OF CREDIT IN STOCK EXCHANGE TRANSACTIONS

The credit which Wall Street uses in its various operations is obtained primarily from the banks and trust companies in the financial district. While it is true that not all of these institutions are what may be called "Stock Exchange banks," and a number of them pay much more attention to financing trade and commerce than to financing the issue and sale of securities, yet nearly all, if not all, bear some relation to the security market, and many of them deal largely with brokers.

Out of Town Loans.—In addition to these local institutions the stock-market obtains a large amount of credit in the shape of direct loans made by banks and trust companies in interior cities, carrying on this business through their bank correspondents in New York. At times the aggregate of this invisible credit affects materially the position of the money-market. In 1906 it was estimated that the loans of outside banks in New York amounted to \$300,000,000. Wall Street likewise at times obtains credit, in imposing amounts, from European money centers.

Money and Securities.—The different ways in which the money- and the stock-markets meet are concisely but comprehensively summed up by Professor Jacob H. Hollander as follows:

(1.) Stock exchange securities are used as collateral to secure mercantile discounts and personal loans in the insufficiency of commercial or personal credit.

(2.) In the interval between original sale and ultimate ab-

sorption by investors newly issued corporate securities are used by underwriting syndicates and syndicate participants to secure bank advances.

(3.) Banking institutions invest in stock exchange securities such part of their resources as are not employed in loans and discounts in consideration of interest return and in anticipation, semi-speculatively, of appreciation in market value.

(4.) Bond houses and stock-brokers engaged in the sale of investment securities obtain bank loans as working capital upon unsold holdings.

(5.) Speculative purchases of stock exchange securities are financed partly by time loans, but in the main by demand loans obtained from banking institutions and secured by such securities as collateral.

To which should be added the process known as certification of brokers' checks.

How Brokers Obtain Credit.—It is of chief interest to the student of the Wall Street system to inquire into the methods employed by members of the Stock Exchange in obtaining their credit in the purchase and sale of securities for investment and speculation.

It has been seen that while the stock-broker executes orders for his customer on usually 10 per cent. margin, he is obliged to pay for the securities in full upon delivery. It would be manifestly impossible for any broker to do this without borrowing money from the banks. He has extended credit to his customer; he must himself get credit from the banks. For instance, a broker buys 5,000 shares of New York Central at 110, amounting to \$550,000. But he executes the order for his customer on a margin of \$55,000, so that he must pay the difference of \$495,000, either out of his own capital or else borrow of the banks. Necessity compels him to go to the banks. He takes the 5,000 shares of the New York Central to the banks and offers them as a collateral for a loan. If he is wise, he already has an agreement with

his customers enabling him to do this. The banks lend him \$440,000 on the collateral at the prevailing rate of interest. With the \$55,000 from his customer and \$440,000 from the banks, the broker has \$495,000, or \$55,000 less than he must pay for the stock. This he would have to supply out of his own capital.

What is the net result? The customer is nominally the owner of 5,000 shares of stock, which he has, however, never seen, and which is actually in possession of banks whose very names he may not know. The interest of the banks in the stock represent 80 per cent. of its value; the broker's, 10 per cent.; and the customer's, 10 per cent. It does not follow that every transaction is exactly of these proportions of risk. The broker, in fact, may be able to obtain from the banks loans large enough to enable him, in connection with his customer's margin, to carry a transaction without the employment of much, if any, of his own capital. This example has been based upon the general rule, that the margin demanded by the broker of his customer is usually 10 per cent., and the margin demanded by the banks of the broker is usually 20 per cent., the percentages in both cases varying in accordance with the character of the securities. The example serves to illustrate clearly the close intimacy existing between the money-market and the stock-market. The money-lenders are, in fact, the actual holders of the securities dealt in, and they have the largest interest at stake in the maintenance of values.

Certification.—But this is not the only connection between the banks and the stock-brokers. Let us return to the example already given. The broker has bought stock for which, on delivery, he must pay \$550,000. Now, before he can get any loans from the banks on this stock he must have the stock in his possession, so as to be able to use it as collateral for the loans. Before he

can get it in his possession he must pay for it. His balance in the bank may not be more than \$50,000. What is he to do?

Right here enters the new alliance between the banks and the brokers. It goes by the name of certification. The broker, in the case instanced, draws a check for \$550,000 in payment for the stock. The check is sent to the bank where the broker keeps his account for certification. The cashier or paying teller indorses the check across its face, thus certifying not only that the signature is correct, but that the bank will pay the amount of the check on presentation and identification, or when it comes to it through the operations of the Clearing-House. But it has been said that the broker has a balance of only \$50,000, and here the bank is certifying to his check for \$550,000. That is what is called "overcertification," and it is another form of a great system of credits on which the transactions of Wall Street stand.

Overcertification.—Overcertification is in effect a temporary loan, and as employed in Stock Exchange transactions involves little risk. There are a number of Wall Street banks—not all—that do a regular business of certifying brokers' checks, but a large proportion of this business is done by the trust companies. A broker enters into a definite arrangement with one of the institutions on a basis something like this: The broker agrees to keep a daily cash balance at the bank of, say, \$50,000; in return, the bank agrees to certify his checks to an amount, say, of \$1,000,000. While this seems startling, the practice is in reality not dangerous. The immediate cause of the Seventh National Bank failure in 1901 was, indeed, an overcertification, but the real causes were deeper seated than that. There had been no other serious trouble caused by certifications for brokers in the twenty preceding years.

The banking institutions are very conservative in transactions of this kind. They must know all about the broker, his character, good judgment, and business methods and standing. In other words, personal character is a valuable asset in Wall Street. A man's credit in the Exchange and in the banks depends largely upon it. Then the bank stipulates, in entering upon an agreement of this kind with the broker, that, while it will certify, say, to an amount of \$1,000,000 on a net daily balance of \$50,000, the broker must not frequently reach that limit. Moreover, he must make his deposits at the bank as frequently as he receives checks for payment for securities delivered. He can not wait until nearly three o'clock and then make one deposit for the day, but must deposit, it may be, six or seven times a day. The result is, that while the broker is receiving the benefit of large certifications in excess of his balance, at the same time he is at frequent intervals depositing other certified checks. Deposits and certifications thus go on simultaneously. The violation of the National bank law against overcertification is in most cases more technical than actual. Of course, as soon as the broker gets his stock and arranges his loan he is able make every check good, and by his arrangement with the bank he is bound to maintain his average daily balance of \$50,000, or whatever other amount may be agreed upon. The larger the average balance the larger the certification.

The Law.—It has been said that the practice of overcertification of brokers' checks is a technical violation of the National banking law. That law provides that it shall be unlawful for any officer, clerk, or agent of any National Banking Association to certify any check drawn upon the association, unless the person or company drawing the check has on deposit with the association, at the time such check is certified, an amount

of money equal to the amount specified in such check.

Morning Loans.—But even the appearance of violation of law may be open to criticism, and therefore the National banks are gradually withdrawing from this business, and other institutions are taking their place. The institutions also are beginning to adopt other systems, which have the merit of simplicity and freedom from possible illegality. Many of them are making morning loans to brokers of an amount that will cover their probable certification for the day. These loans are based on the “single named paper” of the broker—that is to say, his individual, unindorsed note. With such a loan the broker has to his credit a deposit at the bank sufficient for the day’s probable business, and technical overcertification is avoided. The practical result is the same under either system. The latter has the merit of avoiding the appearance of evil.

In 1911 a leading state bank adopted still another method of protection in the certifying of brokers’ checks. This is in the form of a trust agreement which a customer of the bank who desires the benefit of overcertification must sign. It is as follows:

We hereby request the Bank from time to time to certify our checks which shall be payable to the order of some third person, persons or corporation in amounts in excess of our balance on deposit with the Bank at the time of certification in order that we may receive from the payee or payees of said checks certain bonds, notes, securities, merchandise or cash, or in order that we may procure the release of certain securities or merchandise held by the payee as collateral to a loan to us, and in consideration of such over-certification by the Bank of our checks we promise and agree to hold the said checks, and all securities, merchandise and cash received by us with the proceeds of any checks so certified as trustee for the Bank, to secure the amount of the certification granted by said bank and to deliver said securities, merchandise or cash so obtained to the Bank before the close of business on the day of certification of said checks.

Any deficit or failure resulting from the non-performance of this trust shall constitute an indebtedness of ours to the Bank, the validity of which is hereby acknowledged.

This agreement shall be a continuing agreement and shall cover every over-certification of our checks and the securities to be acquired by the proceeds thereof, and it shall not be necessary to re-execute the same for each over-certification.

All the powers of sale and transfer of the property acquired by us through this trust agreement shall pass to and become the right of the Bank.

A broker who has his checks certified has necessarily no other credit hold on his bank. A merchant depositing in a bank has the privilege of having his paper discounted to a certain amount proportionate to his balance. Not so the broker. He must arrange his loan in a different basis.

Concerning the question of the certification of brokers' checks, William B. Ridgely when Comptroller of the Currency said:

The payments of stock delivered under the rules of the New York Stock Exchange are largely made by means of certified checks. The certificates are now made under forms carefully prepared by able lawyers strictly and technically in conformity with the law. Even if this practice were altogether stopped it would not have any very great effect on the Stock Exchange transactions and certainly would not stop stock gambling and speculation. It might cause some inconvenience and might make necessary the delivery of stock on some other system, but such a change would be made and the transactions proceed, even of the bank's methods of handling them had to be entirely revolutionized.

Amount of Certification.—The amount of certification required in the operations of the stock-market is stupendous. On the deliveries made in the Stock Clearing-House transactions the certification actually required in 1901 was nearly \$11,000,000,000. The Stock Clearing-

House clears about 85 per cent. of all the sales of stocks. The remaining 15 per cent., as well as transactions in bonds, must therefore be taken into account in any estimate of total certification required. The bonds alone added at least another billion, and it is safe to say that the business of the New York Stock Exchange, exclusively, in 1901, required a certification of \$14,000,000,000, or an average of about \$45,000,000 a day. This was over one-fifth the average daily clearances of the Bank Clearing-House.

It may be asked, What does a bank make by certifying brokers' checks? In the example given, the bank gains the use of \$50,000, the required daily balance of the broker. But as the National bank is, by law, required to keep a reserve of 25 per cent., its net gain by this operation is the use of \$37,500. Its profit is the interest it earns by the loaning of that amount. If it were not profitable the bank would not engage in the business.

Loans in Exchange.—Loans to brokers on stock and bond collateral constitute a large proportion of the business of many of the Wall Street banks. This business is carried on by a bank in direct contact with the stock-brokers and also through the agency of money-brokers who act as middlemen between lenders and borrowers. The bulk of the loans are made by the money-brokers, and the rate for call-money is practically established in the Stock Exchange. There is a regular place in the Board-Room for effecting loans, and certain members make this their exclusive business.

The banker comes to his office in the morning and ascertains exactly how his bank stands after going through the Clearing-House. If he finds he has a satisfactory surplus above the required legal reserve, he calls in one of the money-brokers and tells him to lend \$500,000 or \$1,000,000 or \$5,000,000, as the case may be.

Besides the banks, the private bankers are large lenders of money to brokers. Even some mercantile concerns lend money on stock collateral. Railroad and insurance companies are at times large lenders. Russell Sage for many years was a heavy lender on the Street, keeping a considerable share of his fortune in cash, for profitable employment in this way.

Rates of Interest.—Rates of interest have fallen greatly in the last quarter of a century. Formerly, brokers, and merchants as well, were compelled to pay as much as 2 per cent. a month for credit; but as the country has grown richer, rates have declined, and call-money now only occasionally goes above 6 per cent., which is the legal rate of interest in the state of New York, although loans on securities at higher rates are lawful under section 379 of the general business law which reads:

Sec. 379. In any case hereafter in which advances of money repayable on demand, to an amount not less than five thousand dollars, are made upon warehouse receipts, bills of lading, certificates of stock, certificates of deposit, bills of exchange, bonds, or other negotiable instruments pledged as collateral security for such repayment, it shall be lawful to receive or contract to receive and collect, as compensation for making such advances, any sum to be agreed upon in writing by the parties to such transaction.

It is a mistaken idea that the banks rejoice at a higher rate of interest. As a matter of fact their profit is greater when the rate is 3 or 4 per cent. than when it is 25 per cent. For in the latter case corporations and large individual depositors will withdraw their money in order to make direct loans to borrowers, thus depleting the resources of the banks. But when the rate is 3 or 4 per cent. they will keep their money in the banks, which have then the profitable use of it. Some banking institutions make it a rule never to make call-loans at

more than 6 per cent. In times, however, when a large commercial demand for credit coincides with a financial demand, and especially when there is a "flurry" in the market rates of call-loans will advance to high figures. But in 1911 the rate never went above 6 per cent., reaching the highest figure in the first week of January and the first week of December. When call-money rules at 1, 2, or 3 per cent., it is said to be easy; when it rises to 6, 7, or 8, it is called very firm; and if it goes to higher figures, it becomes stringent.

Call-loans are made subject to repayment on demand. Practically, however, they are one-day loans, that is, subject to call the next day. A loan made to-day is not called until to-morrow. In calling loans, banks are accustomed to give ample notice in writing in some such form as that shown on page 276 unless the telephone is more convenient and it usually is.

The whole machinery of the Street, from the sale of a stock in the Exchange, its clearance through the Stock Clearing-House, its delivery to the buyer, its deposit with a bank as security for a loan, is therefore of the simplest and most direct nature. Each party to every transaction obtains the utmost of protection with the least labor and the smallest possible amount of "red tape."

The bank's protection consists in its actual holding of the collateral, and either in a note signed by the borrower in each transaction or in a continuing agreement, which its customer signs, enabling the bank to sell the securities, without notice, in case the borrower neglects to respond to the call for payment of the loan. This agreement, which obviates the necessity of a new note each time a new loan is made, is generally in the following form:

Know all Men by these Presents, That the undersigned, in consideration of financial accommodations given, or to be given, or

THE THIRTIETH NATIONAL BANK
OF THE CITY OF NEW YORK

NEW YORK, *Feb. 1, 1912*
.....

S. E. Broker & Co.
.....

.....

DEAR SIRs:

Please send check

for \$100,000, Loan dated *Jan. 20, 1912*,
.....

and oblige.

Yours respectfully,

WILFRED HONE,

Cashier.

FORM USED IN CALLING LOAN

continued to the undersigned by THE THIRTIETH NATIONAL BANK OF THE CITY OF NEW YORK, hereby agree with the said Bank that whenever the undersigned shall become or remain, directly or contingently, indebted to the said Bank for money lent, or for money paid for the use or account of the undersigned, or for any overdraft or upon any indorsement, draft, guarantee or in any other manner whatsoever, or upon any other claim, the said Bank shall then and thereafter have the following rights, in addition to those created by the circumstances from which such indebtedness may arise against the undersigned, or his, or their executors, administrators or assigns, namely:

1. All securities deposited by the undersigned with said Bank, as collateral to any such loan or indebtedness of the undersigned to said Bank, shall also be held by said Bank as security for any other liability of the undersigned to said Bank, whether then existing or thereafter contracted; and said Bank shall also have a lien upon any balance of the deposit account of the undersigned with said Bank existing from time to time, and upon all property of the undersigned of every description left with said Bank for safe keeping or otherwise, or coming to the hands of said Bank in any way, as security for any liability of the undersigned to said Bank now existing or hereafter contracted.

2. Said Bank shall at all times have the right to require from the undersigned that there shall be lodged with said Bank as security for all existing liabilities of the undersigned to said Bank, approved collateral securities to an amount satisfactory to said Bank; and upon the failure of the undersigned at all times to keep a margin of securities with said Bank for such liabilities of the undersigned, satisfactory to said Bank, or upon any failure in business or making of an insolvent assignment by the undersigned, then and in either event all liabilities of the undersigned, to said Bank, shall at the option of said Bank become immediately due and payable, notwithstanding any credit or time allowed to the undersigned by any instrument evidencing any of the said liabilities.

3. Upon the failure of the undersigned either to pay any indebtedness to said Bank when becoming or made due, or to keep up the margin of collateral securities above provided for, then and in either event said Bank may immediately without advertisement, and without notice to the undersigned, sell any of the securities held by it as against any or all of the liabilities of the

undersigned, at private sale or Brokers' Board or otherwise, and apply the proceeds of such sale as far as needed toward the payment of any or all of such liabilities, together with interest and expenses of sale, holding the undersigned responsible for any deficiency remaining unpaid after such application. If any such sale be at Brokers' Board or at public auction, said Bank may itself be a purchaser at such sale free from any right or equity of redemption of the undersigned, such right and equity being hereby expressly waived and released. Upon default as aforesaid, said Bank may also apply toward the payment of the said liabilities all balances of any deposit account of the undersigned with said Bank then existing.

It is further agreed that these presents constitute a continuing agreement, applying to any and all future as well as to existing transactions between the undersigned and said Bank.

Dated, New York, the.....day of.....19....

Time-Loans.—Most brokers seek to secure a certain proportion of their required line of credit on time. Thus time-loans are made. These are loans based on stock and bond collateral, but are not subject to call until the expiration of a certain specified number of days, when they must be paid or renewed. Formerly, time-loans were made by months, but now by days. Thus there are thirty-day, sixty-day, and ninety-day loans. The rates for time-loans are generally higher than for call, except in times of severe stringency in the money-market, and banks are commonly very conservative in making such loans for long periods. The bank's deposits being subject to withdrawal on demand, it follows that it can lock up only a comparatively small part of its resources in the form of time-loans. The stock-broker, though paying more for his credit than he would on the call-loan basis, escapes the liability of having all his loans called at one time.

A blank for the recording of the details of a time loan is shown on page 279.

During the last ten years more and more dependence

10-10-11-500		TIME LOAN.						1802	
\$ _____									
Phone _____									
No. _____									
Page _____ Date _____ 191 Due _____ 191 Rate _____									
INTEREST CHARGED				INTEREST PAID					
MO.	AMOUNT	MO.	AMOUNT	DATE	CREDIT TO INT. ACCRUED	CREDIT TO INTEREST	PAID TO	CREDIT TO INTEREST	PAID TO
JAN.		JULY							
FEB.		AUG.							
MAR.		SEPT.							
APR.		OCT.							
MAY		NOV.							
JUNE		DEC.							
ORIGINAL	SUB.	COLLATERAL				PRICE	VALUE		
RECEIVED ALL COLLATERAL TO THE ABOVE MENTIONED LOAN									
NEW YORK, _____ 191					PER. _____				

FORM OF RECORDING TIME LOAN

upon the telephone in call-loan transactions has been the rule in the money-market, it being much more easy, quick and satisfactory for both lender and borrower to

make their arrangements in this way, both for entering into and terminating loans. No loans can be called or paid after 1 P. M. unless notice has been given before that time, and the broker has some time allowed him in which to make other arrangements for necessary credit.

The method of making call-loans has always been exceedingly easy, and the changes made during recent years have been mostly to make the process more simple and yet secure protection to both parties. If the bank agrees to make a loan and the broker accepts the rate offered, the latter presents his securities as collateral in a large envelope marked upon its face with all particulars of the loan, as shown on page 281. Unless a collateral agreement is on file at the bank where the loan is made the broker signs a note on a form like that on page 282.

The rate in the above sample loan is given at $7\frac{1}{2}$ per cent. simply to indicate that call-money may be legally loaned at a rate above 6 per cent. As has already been said the rate rarely rises above the 6 per cent. point, and the $7\frac{1}{2}$ was not the ruling rate at the date given.

The bank puts the envelope of securities received from the borrower and all papers in connection with the loan which are not to be returned to the borrower when loan is paid, into another and larger envelope like that on page 283.

By adding the loan card (see page 284) with messenger's receipt for collateral, the outside envelope is then complete and ready for filing.

The sample transaction here illustrated is as follows: The Thirtieth National Bank loans to S. E. Broker & Co. \$100,000 on demand at $7\frac{1}{2}$ per cent. interest, the broker securing the loan with stocks whose market price is \$123,100. With this collateral he gives his note in which the bank is authorized, upon non-payment of the loan

DEMAND LOAN

TO

S. E. BROKER & CO.

BY

Thirtieth National Bank

AMOUNT, \$ 100,000.- RATE 7 1/2

DATE FEB 1 1912

SECURITIES

200	W. Central	110	22	000
100	Atchison		10	5
100	Great Northern Pfd.		12	8
100	Ches & Ohio		7	
200	Penna (1/2)	122	12	2
300	Steel	60	18	
100	Consolidated Gas		13	8
100	Amer Telephone & Tele		13	9
100	Amer Smelters		6	8
50	Amalgamated Copper	60	3	
100	Pacific mail		3	1

123 100

RECORD OF DEMAND LOAN

when due, to sell the securities either at public or private sale; and the borrower also gives to the bank a lien for the amount of the note upon the title or interest of the borrower in any other property or securities in the keeping of the bank, and also upon the balance of the deposit account of the borrower in the bank.

15-10-10

\$100,000 New York, FEB 1 1912 191

ON DEMAND, for value received, the undersigned promise to pay to

THE THIRTIETH NATIONAL BANK OF THE CITY OF NEW YORK,

OR ORDER, at its banking office in New York City, in funds current at the New York Clearing House, with interest from the date hereof at the rate of *7 1/2* per cent. per annum (payable monthly on the first day of each month),

One hundred thousand Dollars.

having deposited with the said Bank as collateral security for the payment of this note and of any other liability or liabilities of the undersigned to the said Bank, due or to become due, and of any liability hereafter contracted or existing, the following property:

viz.: SECURITIES AS PER ENVELOPE OF THIS DATE

1

of the estimated market value of *\$123,000*, the undersigned also hereby giving to the said Bank a lien for the amount of all the aforesaid liabilities upon the title or interest of the undersigned in any other property or securities at any time given unto or left in or in any way come into the possession or custody of the said Bank for safe keeping or otherwise, and also upon the balance of the deposit account of the undersigned with the said Bank existing from time to time.

In case the securities at any time pledged for any of the aforesaid liabilities should decline in market value, the undersigned agree, without notice or demand, to deposit forthwith with the said Bank additional securities to its satisfaction, and in case of failure to do so, this note and all other liabilities of the undersigned to the said Bank shall at once become due and payable without demand of payment thereof, and the said Bank may immediately sell and apply the said securities in manner and with the effect hereinafter provided.

The undersigned agree that in the event of the insolvency of the undersigned or of any guarantor or endorser of this note all the aforesaid liabilities shall, at the option of the said Bank, become immediately due without demand of payment thereof.

The said Bank is hereby authorized, upon the non payment of any of the said liabilities when due or made due, to sell assign and deliver the whole of the said securities or any part thereof or any substitutes therefor at auction or otherwise, or to sell assign or property of the undersigned, or in which the undersigned has any right or interest, given unto, or left in or in any way come into the possession or custody of, the said Bank, at any Exchange or at public or private sale either for cash or on credit or for future delivery at the option of the said Bank, without either advertisement or notice, which are hereby expressly waived. If such securities or property are so sold at any Exchange or at public sale the said Bank may itself purchase the whole or any part thereof free from any right of redemption on the part of the undersigned, the same being hereby waived and released.

In case of sale made for any cause, after deducting all costs or expenses of collection, sale or delivery, the said Bank may apply the residue of the proceeds to pay either one or more of all the aforesaid liabilities whether then due or not, as it shall deem proper, making proper rebate for interest on liabilities not then due and returning the overplus if any to the undersigned, the undersigned agreeing to be and remain liable to the said Bank for any deficiency arising upon such sale or sales.

S. E. Brooker & Co.

NOTE GIVEN BY BROKER

The bank has a card system of its own by which it records the various transactions with each customer, as for instance that shown on page 285. This enables the bank to see at a glance the total amount of the accommodation given to each borrower.

Substitutions.—It frequently happens that the bor-

THE THIRTIETH NATIONAL BANK
OF THE CITY OF NEW YORK

No. 1729

Page 243

S. E. Proctor & Co

Date FEB 1 1912 1912

Due _____ 191 _____

AMOUNT LOANED

AMOUNT PAID

[illegible]

COLLATERALS

[illegible]

THE BANK'S ENVELOPE

Loan No. 1729.

The Thirtieth National Bank

OF THE CITY OF NEW YORK

Page No. 243

Feb 1st 1912

Demand Loan of \$100,000.

To

S. E. Broker & Co

COLLATERALS

Price Value

200	N. Y. Central		22
100	Atchison		
100	Great Northern Rfd		128
100	Ches & Ohio		
200	Penna (1/2)	122	122
300	Steel	60	18
100	Consolidated Gas		138
100	American Telephone		139
100	Amer Smelters		68
50	Amalgamated Copper		3
100	Pacific Mail		31
300	Iowa Central Rfd	27	81
100	Amer Can Rfd		9
			1227
MAR 29 1912			
New York,			
Received all the collaterals to			
the within mentioned Loan.			

THE LOAN CARD

rower wishes to substitute one stock for another in the collateral for the loan, and the bank will accommodate him provided the security for the loan is not materially weakened. For the broker in the course of his business may be required to sell one of the stocks and make delivery. For instance in the loan indicated the firm desires to substitute new stocks for others to be withdrawn, and he therefore sends to the bank a letter like that on page 286.

		DATE		AMOUNT		RATE WHEN MADE PAID		PAID	REMARKS
BOOK	PAGE								
23	149	Jan	27	200.00		6	5	Feb 6	All bonds
	180	Jan	4	50.00		5 1/2	1 1/2		
	217	July	7	100.00		2 1/2	1 1/2	Sept 9	Cashed
	222	Aug	19	100.00		2	1 1/2		
	243	Feb	1	100.00		7 1/2	3	Mch 29	

THE BANK'S LOAN CARD

In this case 100 shares of Atchison and 100 shares of Chesapeake and Ohio are withdrawn and 300 Iowa Central preferred and 100 American preferred are substituted. By this substitution the security will be shown upon analysis to have been somewhat reduced in quality. The original loan was on a 16 point basis (therefore less than the technical 20 per cent. basis). The new loan is on a 13.7 per cent. basis. Comparison of the average

S. E. BROKER & CO.,

79 BROADWAY

NEW YORK

FEB 7 1912

Thirtieth National Bank

GENTLEMEN:

FROM THE COLLATERAL
TO OUR LOAN OF \$100,000, DATED Feb. 1st

PLEASE DELIVER TO BEARER

<u>100 Atchison</u>	<u>10.500</u>
<u>100 Ches. & Ohio</u>	<u>7.</u>
	<u>17.500</u>

IN EXCHANGE FOR

<u>300 Iowa Cent. Pfd. 27</u>	<u>8.100</u>
<u>100 Amer. Can Pfd</u>	<u>9.</u>
	<u>17.100</u>

VERY TRULY YOURS

S E Brokers & Co.

REQUEST FOR SUBSTITUTION

price as between the original loan and the loan with substituted stocks shows that the 1450 shares in the former valued at \$123,100 would average 85, while the 1650 shares in the substituted collateral valued at \$122,700 averaged 74. In the original loan one-half of the securities were railroads which are usually preferred. In the substituted loans the railroads fell below that amount. The substitution slip is filed in the bank's big loan envelope.

Frequently there are several substitutions in one day and in the stock panic of May 9, 1910, there were eleven substitutions in one loan.

Scrutinizing Collateral.—In making loans the bank scrutinizes the collateral closely. The securities must be strictly good delivery according to the rules of the Exchange. Stocks and bonds for which there is not a constant market are generally not acceptable. The most approved collateral, as has been indicated, are the stocks and bonds of standard railroad companies, listed at the Exchange and having a high standing. There are also industrial companies whose stocks are equally acceptable as loan collateral. But, as a rule, most banks discriminate against industrials to this extent, that they will generally make no loan on industrial collateral alone, or if they do, they charge a much higher rate of interest. When industrial stocks are accepted it is generally required that there must be railroad or other approved securities with them. It is needless to say that Government bonds always rank as the very highest class of collateral, and the banks require no margin on such security. If the market value of the securities deposited for a loan declines, the banks are obliged to call for more collateral in order to keep the required margin good.

Change in Rate.—The bank is frequently obliged to mark up the rate for the call loan. Changes in the rate,

THE THIRTIETH NATIONAL BANK
OF THE CITY OF NEW YORK

NEW YORK, Feb. 2, 1912.

S. E. Broker & Co.,

DEAR SIRs:

If agreeable, we mark your loan

\$100,000

dated Feb. 1, 1912.

\$

dated _____

dated _____

as renewed at 6 per cent. from this date.

Please confirm our action by stamping perforated slip,
which kindly return to us.

Yours respectfully,

WILFRED HONE,

Cashier.

We mark rate of interest on your Loan 6 per cent. from
this date.

per _____

Date Feb. 2, 1912.

NOTICE OF CHANGE IN RATE OF INTEREST

whether up or down, are usually made over the 'phone, but if it is advisable to secure confirmation the form on page 288 may be used, and in this illustration a reduction of the rate is noted.

Legality.—It has been said that when a broker pledges as collateral for a bank loan the securities which he has bought for a customer, and which the broker holds as security for a loan made to the customer, that is rehypothecation. But this is the universal practice of the Street, to which every operator in stocks tacitly agrees. The illegality of the operation can be avoided by an agreement between brokers and customers. The law on this subject was expounded a few years ago by Justice Williams in the Appellate Division of the New York Supreme Court. He held practically that when securities carried on margin for a customer were pledged with other securities for loan for a greater amount than the indebtedness of the customer on account of the purchase of securities, and without the broker retaining in his possession other securities of a like kind and amount, that was conversion by the broker of the customer's property. Hence the necessity for an understanding between brokers and customers on this subject. If a customer will not agree to this absolutely necessary use of his securities, he might as well keep out of the stock-market.

As was shown in a preceding chapter the loans secured by stocks and bonds amount to fully one-third of the total outstanding credits in the United States. Whether this constitutes the most useful form of credit is a matter of some dispute, but the security loan is undoubtedly, taking everything into consideration, the safest form of credit. Its advantages are:

Advantages of Security Loan.—The ease by which securities can be made the basis of loans, the mere taking of an envelope containing the collateral to the

lender, after an arrangement made over the 'phone as to amount of principal and rate of interest, being all that is needful; while in the case of default there is a market at hand in which the securities may be sold by the lender to realize the principal of the loan.

Its chief defect is that the security loan largely eliminates the element of character from the contract entered into. The personal standing of the borrower is far less a factor than the market price of the securities he offers as collateral.

Three Classes of Credit.—There are three main classes of credit:

1. That based upon the personal and business standing of the borrower;
2. That based upon actual commodities such as cotton, grain, coffee, and the like, or on warehouse receipts or bills of lading representing the same;
3. That based upon stocks and bonds.

Each has its peculiar merits and demerits. The first two have a more direct relation to the movement of commerce than the security loan, and yet the latter, like the two others, has its proper place in the credit market and performs a useful function.

Loans based upon personal or firm credit require the elaborate machinery of the modern credit department with all its facilities for ascertaining every essential fact regarding the borrower and his business. But the regulations imposed by the lenders have the inestimable benefit of enforcing higher personal and financial habits; and no more useful contribution has been made to bank credits in recent years than the rule requiring borrowers to make and sign statements regarding their business which are minute and searching in the information which they exact. Loans on commodities and merchandise are subject to peculiar difficulties and perils, but are fundamental "to the commercial supremacy of the country,

and handled with intelligence and proper care, can be made eminently safe." *

REFERENCES

Those interested in this branch of the subject may consult Dr. Jacob H. Hollander's "Bank Loans and Stock Exchange Speculation," a pamphlet issued by the National Monetary Commission, 1911.

* *Journal of American Bankers' Association*, February, 1912.

CHAPTER XX

THE BANK STATEMENT AND THE MOVEMENT OF MONEY

“The interesting evolution of means of exchange which we are witnessing and which is familiar to everybody seems to be leading us, after the well-defined periods of barter and money, to a system of mere clearing of balances. All exchange operations would then be settled by simple book transfers. Coin, thus reduced to the condition of money on account, would cease to play any real part. Economists are even thinking of a return to barter, which would complete the cycle, bringing us back to the original state after thousands of years and combinations of all kinds. Such would be the course of this evolution.”—Maurice Patron.

The important changes in the bank statement make it a more complete exhibit than ever of the banking conditions of New York. Even the weekly statement of the Bank of England scarcely exercises a more potent influence on the money-markets of the world than does the weekly statement of the New York Bank Clearing-House.

The movement of money in and out of the banking institutions, and the volume of their deposits and loans, are closely watched, not only by every stock-broker and stock operator, but by every man of large affairs who is dependent upon the stability of credit for the security of his business, and upon the rate of money, to determine whether he has a margin of profit or not.

All lines of business are sensitive to changes in the money rate, but the stock-market is peculiarly so on ac-

count of its intense mobility. It is true that sometimes the stock-market asserts its independence and advances in spite of high rates for loans, but, as a general rule, any shortage in the supply of credit checks stock speculation and produces declines in prices. Any sudden or severe contraction of credits will produce a "flurry" in the market—that is, a sharp break in prices, attended with more or less excitement. If the contraction is so extreme as to make it impossible to arrange loans, large blocks of securities, which can not be carried, are dumped on the market for what they will bring, and the Street then has a panic. Wall Street therefore scrutinizes the bank statement with the utmost care.

This statement is issued by the Clearing-House once a week, on Saturday, at noon. If Saturday is a holiday, it is issued on Friday, at three o'clock. It gives the condition of all the member-banks at that time, their loans, their net deposits, their cash holdings, and their circulation.

Averages.—Formerly the statement presented only an exhibit of the average conditions of the banks, but now to this exhibit of averages is added a statement of actual conditions on the day of the issue. The actual figures are, however, only for the condition of the banks as a whole; the exhibit for each individual bank is on a system of averages. For instance, the bank ascertains what its outstanding loans were on each day of the week, and reports the average of these items for the week to the Clearing-House. It does the same with its deposits and cash holdings. The average for the week may be quite different than the actual figures for the last day of the week. The banks' actual condition might be better or worse. It follows that if a large amount of currency should be received on Friday, it would count only for one day in the week's average of cash holdings, and the

actual condition of the bank on Saturday would be better than the average statement indicated. If there had been a large withdrawal of gold on Friday, for export, the loss would count only for one day in the week's average, which would make the statement appear better than actual conditions. A striking illustration of the effect of the law of averages upon the bank statement was given in September, 1902. The statement of September 20 reported a loss in cash of \$7,300,000, while the actual loss, so far as it could be estimated, was only \$3,600,000. The statement of September 27, on the other hand, reported a gain in cash of \$1,790,000, while the apparent loss was \$4,000,000. The former statement reported a deficit in reserves; the latter a surplus.

The system of averages has the advantage that it removes at once the temptation and the possibility of "window dressing."* If a bank reports its actual condition on a given day it might take pains to make the showing better than the actual facts warrant, as, for instance, by borrowing money to inflate its exhibit of reserves. This is what is called "window dressing," that is to say putting more attractive goods in the window than are on the shelves for sale. But while the average system possesses this advantage, it has the important disadvantage, that though it is a fair statement for a week, it is often an erroneous statement for the day it is issued. The Clearing-House therefore has changed the form of its weekly statement, by publishing the average figures for the week of each "individual" bank, and

* "The expression 'window dressing' in its application to financial institutions had its origin in Great Britain. It arose out of the fact that the joint-stock banks were not accustomed to keep cash reserves of any considerable size, but made it a practice when it came time to render a public return to temporarily augment their cash with a view to making it appear that they habitually carried considerable reserve."—From the *Commercial and Financial Chronicle*, Jan. 27, 1912.

adding thereto the actual figures for "all" the banks on the day of issue. In this way it secures the advantages of both systems of reporting conditions.

Watching for Statement.—At noon on Saturday every Wall Street man watches the tape for the report from the Clearing-House. What he gets at first is a mere summary of the statement, and an account of the gains and losses as compared with the following week. For example, taking the statement of January 13, 1912, the first announcement was that the surplus reserve had increased \$5,332,600; loans had increased \$39,982,000; specie had increased \$14,438,000; legal tenders had increased \$3,035,000; net deposits had increased \$46,298,000 and circulation had decreased \$150,000.

This, for the time being, is sufficient for the Street. But the banker and broker and merchant will desire, especially in critical periods, to know more of the situation, and so will study the detailed statement, which is given out soon after the summary, but which is not sent over the tape. The detailed statement gives the condition of each bank, but requires analysis for a complete understanding.

The following is the statement of averages issued on Saturday, January 13, 1912, and it has a certain historic interest, because it was compiled in, and issued from, the Chamber of Commerce during the week that the Clearing-House was its guest.

The column showing circulation is omitted, and another column is added, showing by percentages whether the bank is above or below its legal reserve. The banks are required to hold 25 per cent. of their deposits as reserve in their own vaults. The trust companies are also required to hold 25 per cent. reserves, but only 15 per cent. need be cash in their own vaults, the remainder being carried on deposit in member banks.

STATEMENT OF THE MEMBERS OF THE NEW YORK CLEARING HOUSE ASSOCIATION
For Week Ending Saturday, January 13, 1912.

Members	* Capital	* Net profits	Loans and discounts Average.	Specie Average.	Legal lenders Average.	On deposit with Clearing House Members carrying 25% cash reserve	Legal net deposits Average	Percent of cash reserve.
Bank of N. Y. Nat'l Bk'g Ass'n	\$2,000,000	\$3,774,700	\$21,869,000	\$4,297,000	\$922,000	.....	\$20,183,000	25.8
Bank of the Manhattan Comp'y	\$2,000,000	\$3,774,700	33,200,000	7,773,000	1,427,000	.....	37,400,000	24.6
Mechanics' National Bank	2,000,000	1,970,400	19,922,000	3,162,000	1,144,000	.....	20,355,000	26.0
Mechanics & Metals Nat'l Bank	6,000,000	8,382,400	56,698,000	14,081,000	4,837,000	.....	57,952,000	28.5
Bank of America	1,500,000	6,208,400	27,780,000	5,458,000	2,027,000	.....	28,795,000	25.9
National City Bank	25,000,000	26,668,400	184,669,000	43,721,000	5,867,000	.....	182,281,000	27.2
Chemical National Bank	3,000,000	6,929,400	28,869,000	5,737,000	1,963,000	.....	27,259,000	28.2
Mechanics' Exchange Nat'l Bk.	600,000	607,000	6,883,000	1,581,000	235,000	.....	7,017,000	25.7
Gallatin National Bank	1,000,000	2,518,000	8,900,000	1,398,000	592,000	.....	7,314,000	27.2
Nat'l Butchers' and Drovers Bk.	300,000	147,100	2,212,000	564,000	84,000	.....	2,486,000	26.0
Greenwich Bank	500,000	898,400	8,694,000	2,368,000	200,000	.....	10,011,000	25.6
American Exchange Nat'l Bank	5,000,000	4,474,200	41,138,000	6,419,000	3,822,000	.....	39,972,000	25.6
National Bank of Commerce	25,000,000	15,893,400	139,362,000	23,647,000	8,736,000	.....	117,945,000	27.4
Mercantile National Bank	3,000,000	2,754,400	14,341,000	2,154,000	925,000	.....	11,583,000	26.6
Pacific Bank	500,000	942,300	4,137,000	582,000	461,000	.....	3,867,000	26.9
Chatham & Phenix National Bk.	2,250,000	1,232,100	15,943,000	2,614,000	1,480,000	.....	15,995,000	25.5
People's Bank	2,200,000	463,600	1,914,000	448,000	150,000	.....	2,424,000	24.7
Hanover National Bank	3,000,000	12,952,400	67,937,000	13,840,000	5,793,000	.....	75,177,000	26.1
Citizen's Central National Bank	2,550,000	1,914,600	23,959,000	5,664,000	627,000	.....	23,785,000	26.4
National Nassau Bank	500,000	628,900	9,696,000	2,158,000	981,000	.....	11,602,000	27.0
Market and Fulton Nat'l Bank	1,000,000	1,808,500	9,215,000	1,482,000	1,112,000	.....	9,367,000	27.6
Metropolitan Bank	2,000,000	1,645,600	12,146,000	3,127,000	247,000	.....	12,768,000	26.4
Corn Exchange Bank	3,000,000	5,494,200	47,722,000	7,982,000	5,876,000	.....	55,836,000	24.8
Importers' and Traders' Nat. Bk.	1,500,000	7,690,200	26,899,000	4,308,000	2,038,000	.....	24,820,000	25.5
National Park Bank	5,000,000	12,990,000	84,645,000	21,791,000	1,987,000	.....	89,764,000	26.4

East River National Bank	250,000	96,700	1,508,000	369,000	108,000	1,823,000	26.1
Fourth National Bank	5,000,000	5,845,200	31,464,000	6,368,000	3,381,000	34,309,000	28.4
Second National Bank	1,000,000	2,329,400	14,538,000	3,560,000	1,377,000	14,475,000	25.5
First National Bank	10,000,000	21,984,400	118,869,000	23,243,000	4,162,000	113,277,000	25.9
Irving National Exchange Bank	2,000,000	1,963,900	25,213,000	5,290,000	1,783,000	27,260,000	25.9
Bowery Bank	250,000	803,600	3,335,000	827,000	56,000	3,471,000	25.4
New York County National Bank	500,000	1,781,000	8,188,000	1,399,000	699,000	8,387,000	25.9
German-American Bank	750,000	732,900	4,096,000	1,161,000	225,000	4,282,000	32.3
Chase National Bank	5,000,000	8,704,500	88,768,000	23,835,000	6,661,000	104,967,000	29.0
Fifth Avenue Bank	100,000	2,159,500	13,433,000	2,847,000	1,029,000	15,204,000	25.4
German Exchange Bank	200,000	887,900	3,442,000	431,000	500,000	3,451,000	26.9
Germania Bank	200,000	1,042,900	5,526,000	1,416,000	154,000	6,418,000	24.5
Lincoln National Bank	1,000,000	1,663,600	15,616,000	2,757,000	1,936,000	16,991,000	27.8
Garfield National Bank	1,000,000	1,252,600	8,781,000	2,231,000	546,000	9,448,000	29.3
Fifth National Bank	1,000,000	1,538,600	3,472,000	432,000	503,000	3,577,000	26.1
Bank of the Metropolis	1,250,000	2,153,800	13,171,000	2,177,000	1,490,000	13,821,000	26.5
West Side Bank	200,000	1,068,300	4,218,000	965,000	255,000	4,775,000	25.5
Seaboard National Bank	1,000,000	2,103,900	23,910,000	5,621,000	2,313,000	28,788,000	27.5
Liberty National Bank	1,000,000	2,770,600	19,450,000	5,293,000	1,289,000	21,821,000	30.1
N. Y. Produce Exchange Bank	1,000,000	801,600	8,310,000	2,035,000	427,000	9,775,000	25.1
State Bank	1,000,000	979,900	10,420,000	2,642,000	1,056,000	14,175,000	25.3
Security Bank	1,000,000	478,400	16,110,000	5,038,000	359,000	21,173,000	25.4
Coal and Iron National Bank	1,000,000	998,600	6,473,000	1,145,000	523,000	6,638,000	25.1
Union Exchange National Bank	1,000,000	1,065,100	9,934,000	1,360,000	1,222,000	10,243,000	25.2
Nassau Nat'l Bank, Brooklyn	1,000,000	2,252,100	18,914,000	1,709,000	302,000	7,830,000	25.6
Manhattan Trust Co.	1,000,000	2,414,700	16,257,000	2,029,000	100,000	14,121,000	15.0
Brooklyn Trust Co.	1,000,000	13,518,400	115,848,000	1,656,000	414,000	12,483,000	16.5
Bankers Trust Co.	5,000,000			13,894,000	656,000	97,066,000	14.9

Analyzing the Statement.—To read the bank statement intelligently one must study it, first as a whole, and second in its various parts. In the statement given it appears that while there was a large expansion in credits during the week, amounting to nearly \$40,000,000, there was at the same time, a notable increase in cash reserves, so that in spite of the expansion in loans, the institutions held \$29,058,250 more reserve than was actually needed, an increase of \$5,332,600 during the week. Thus they had on hand the ability for a further big increase in credits.

The Reserves.—But the student of the bank statement will also examine it to ascertain the condition of each of the big banks, to learn which of them have increased or reduced their loans, which have gained or lost in cash, and which are above or below their legal reserves. To ascertain the legal reserve of a National bank, divide its deposits by four, and the difference between this and its specie and legal tenders added together shows whether it is above or below the legal requirement. The statement of January 13th showed that the National City Bank reserves amounted to 25.5 per cent. of their deposits, the National Bank of Commerce 30.2, the First National 25, the National Park 26.7, the Chase National 26.2, the Hanover National 29.1 and the Fourth National 26.9. The requirement for each of these banks is 25 per cent. Such an examination as this reveals the ability of each of the institutions for further expansion of loans.

Important Items.—The four most important items in the bank statement are:

1. The cash holdings which are ascertained by adding the specie and legal tenders. The cash holdings constitute the reserves of the banks.
2. The surplus reserve which is the excess held above the amount of cash required by law.

3. The outstanding loans.

4. The net deposits, which are the gross deposits (not counting the deposits of the United States Government, but adding the unpaid dividends) less exchanges for the Clearing-House, amounts due from other banks for collection, notes of other banks and checks on non-clearing institutions in this city.

Every National bank is required by law to hold specie and legal tenders amounting to at least 25 per cent. of its deposits. The moment it falls below that amount it must stop discounting until this reserve is made good. State banks are by law required to keep only 15 per cent. reserve, but the Clearing-House, a number of years ago, adopted a rule requiring all State bank members admitted after that date to keep 25 per cent. reserve, the same as the National banks. The Trust Companies which are members of the Clearing-House are required by it, as already stated, to keep 25 per cent. reserves, of which however only 15 per cent. need be cash in their own vaults, and the remainder held on deposit in member banks.

When the cash holdings exceed the reserves required, there is a surplus; when the cash holdings fall below the required reserve, there is a deficit. The surplus reserve, therefore, is the difference between the required reserve and the actual reserve when the latter exceeds the former. There may be an increase in the surplus reserve when there is a decrease in the reserve, which is accounted for by a reduction in the amount of reserve required to a larger sum than a reduction in the cash holdings.

Actual Figures.—The bank statement not only gives the exhibit of averages already shown on pages 296-8, but also a statement of actual figures for the day of issue as follows:

CLEARING HOUSE TABLE SHOWING ACTUAL FIGURES

Actual figures this morning:									
Totals, National and State Banks.	1,376,284,000	306,841,000	86,489,000	87,325,000	1,429,979,000	50,824,000			
“ Trust Companies	555,563,000	51,539,000	7,074,000		396,653,000				
Totals, all members	1,931,847,000	358,380,000	93,563,000	87,325,000	1,826,632,000	50,824,000			
	Increase	Increase	Increase	Increase	Increase	Decrease			
	38,136,000	16,782,000	5,568,000	13,169,000	60,314,000	298,000			
Banks: Cash Reserve in Vault,	\$393,330,000	Cash Reserve Required, (25%)	\$357,494,750	Excess, \$35,835,250	Increase, \$13,060,750				
“ “	“	“	“	“	“				
Trust Co's: “ “	58,613,000	“	59,497,950	Deficit, 884,950	Decrease, 5,349,550				
Aggregate	\$451,943,000								
		Trust Companies' Reserves	With Clearing House Members,	\$87,325,000.	Increase, \$13,169,000.				
Clearings for Week ending January 13, 1912,	\$1,894,142,333.45	Balances for Week ending January 13, 1912,	\$111,624,695.55						
Clearings for Week ending January 6, 1912,	*2,066,419,956.38	Balances for Week ending January 6, 1912,	*107,049,166.15						
Clearings this Day	321,133,464.07	Balances this Day	18,828,983.98						
* 5 Days.									

More Complete Publicity.—But even the bank statement does not give the exhibit for all the banking institutions in New York. While all the important banks and trust companies are members, there are a number of State Banks and Trust Companies that are not members, and of course their returns do not figure in the statement. But since the panic of 1907, a determined effort has been made to bring about more complete banking publicity, and this has been accomplished, first by admitting the principal trust companies to membership, and second by an arrangement with the State Banking Department under which it reports to the Clearing-House, every Saturday, the total deposits, loans and reserves of the State banks and Trust Companies in Greater New York which are not members of the Clearing-House. By combining these figures with the Clearing-House statement of averages, one can obtain an exhibit of banking conditions in Greater New York that includes all institutions. Such an exhibit for January 13th, was as follows:

Loans	\$2,531,983,600
Cash in vaults	518,501,000
Net deposits	2,416,299,800

Loans.—Every analyzer of a bank statement studies the item of loans. This shows whether the banks are expanding or contracting. Contraction is, of course, dreaded by the Street, because it involves the calling of loans and an advance in the rates of money, making it more difficult to carry stocks. On the other hand, too great expansion of loans may seem dangerous, as over-expansion has been the chief cause of most financial crises. Expansion of loans always increases the deposits, and increased deposits call for larger reserves.

It is hard to make the uninitiated understand the significance of the word deposits. The deposits may amount to \$1,000,000,000, and yet the actual money held

by the banks may be only a quarter of that sum. Deposits, therefore, do not necessarily mean actual money, but money and credit combined. For instance, \$10,000 in cash may be deposited by A in the bank. The bank loans \$5,000 to B, who thereupon holds it there as a deposit to draw from. The total deposits are, therefore, \$15,000, although the actual cash is only \$10,000. Thus an expansion in loans always swells the item of deposits.

The Dead Line.—The Street keeps the surplus reserve steadily in view; in fact it may be said to give an exaggerated importance to it. The line between a surplus and a deficit is regarded as a sort of a "dead line." When the surplus reserve declines too close to the line the Street begins to show signs of alarm. There is talk of stringent money and bear prices. If there is a large surplus reserve, money is easy and Wall Street feels secure. Yet too large a surplus may be a bad sign, as it indicates a small demand for money; it may therefore spell stagnation. If the statement as a whole reports a deficit, Wall Street may have a flurry, even a panic. Yet even a deficit may be no just occasion for alarm. The bank statement has at times reported deficits when the situation was sound and the Street in a calm. For instance, on October 5, 1889, there was a deficit of \$1,688,050, which was increased the following week, but there was no special convulsion in the market. Still it is true that in time of financial distress, as in the fall of 1890 and in 1893, the first clear sign of trouble is a deficit.

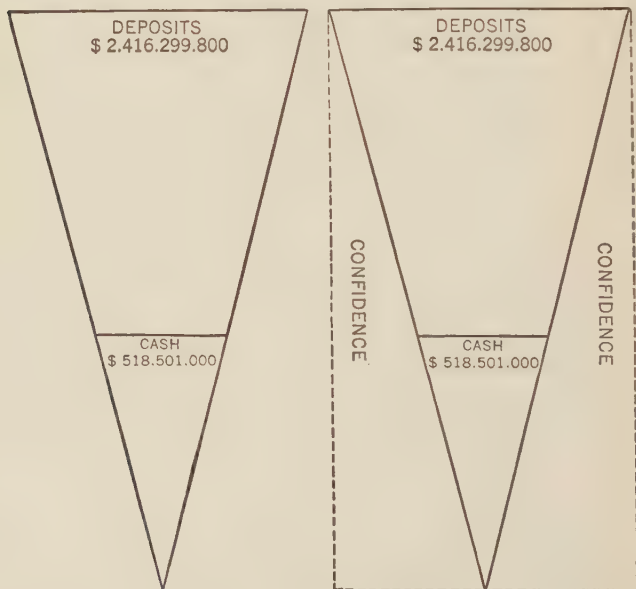
The 25 per cent. reserve is a requirement not for sound but for unsound banking. It is a protection not for the strong, but for the weak, but it is necessary of course that the best institutions should observe the rule equally with the weak. There have been suggestions that the Clearing-House should require a general reserve

amounting to 30 per cent. But it would be difficult to say what is the point of safety or peril in a reserve. The English joint stock banks usually keep cash reserves much less than those of the New York institutions, and the Scottish banks are able to maintain their credits upon even a smaller reserve.

Two Lines of Reserve.—The most effective system would provide for two lines of reserve:

1. A big reserve in a great central association so held as to be easily put where it would be most required in an emergency; and
2. Smaller reserves in each independent institution.

Inverted Pyramid of Credit.—Bank credits may be



represented by an inverted pyramid. Now, an inverted pyramid is employed as a common symbol of insecurity, but as Columbus stood an egg on end by flattening it a

little on the end, so the inverted pyramid of credit may be made secure, provided the reserves are ample enough to inspire confidence. The inverted pyramid, as it would appear from the bank statement already given, shows something like the above. Now what keeps this pyramid standing? With only \$518,000,000 of actual cash on hand in New York, and \$2,416,000,000 of demand deposits, there would be no security if it were not for one thing: confidence. This then keeps the pyramid standing.

Let there be, however, a material reduction in the amount of cash on hand, and confidence would be seriously impaired, and in this fact lies the importance of the cash reserve.

Manipulation.—More significant than all the other items of a bank statement therefore are those representing cash holdings. Credit may be the vital air of the whole financial system, but money is the oxygen in the air, without which there would be suffocation and death. So, in analyzing a bank statement, the reports of specie and legal tenders are of first importance. Specie means both gold and silver. Legal tenders mean any form of paper money that the Government makes legal tender in payment of debts. An increase in cash increases the credit-giving power of the banks. A decrease in cash involves a contraction of credit.

Much has been heard in the Street from time to time of manipulation of the bank statement, for the purpose of influencing the stock-market. Manipulation of the money-market is indeed possible, but it has been made much more difficult by the enlargement of the Clearing-House and the more complete bank statement. A possible way of reducing the cash holdings of the banks is to export gold. Another method is to withdraw legal tenders, and deposit them in a safe-deposit vault. Daniel

Drew is said to have carried, in 1866, several millions of dollars in cash, in a carriage, to Jersey City, in order to produce a stringency in the money-market. There are various ways of hiding money, and of thus reducing the power of the banks to make loans. It would be difficult, however, to produce proof of manipulation of this character in recent years. Suspicion and rumor are not proof. Moreover, any bank guilty of complicity in any such conspiracy would be disgraced, and any National bank which would continue to receive the deposits of any customer after he has once withdrawn money for the purposes of manipulation, would be regarded as having condoned a dishonorable transaction. But hiding of money to influence the rates of loans and prices of stocks does not involve manipulation of the bank statement itself. That is an honest exhibition of average and actual conditions for the week under review. There may be manipulation outside the Clearing-House; there is none in it.

Movement of Money.—As the cash holdings of the banks are what constitute their power of extending credit, the movement of money becomes a matter of vital importance. Are the banks gaining or losing cash? That is the question of questions. There are three principal movements of money:

1. The export or import of specie.
2. The shipment of currency to the interior or receipt of currency from the interior.
3. The payment of money into the United States Treasury and the disbursements of money by the Treasury.

The currency movement from and to the interior is chiefly controlled by the deposits or withdrawals by the country banks. It has already been shown that these banks can keep half of their legal reserves in New York

banks and draw interest thereon. The New York banks, therefore, are continually liable to calls from these banks whenever the local demand for money becomes acute. In addition to acting as depositories for the reserves of the country banks, the New York banks act practically as clearing-agents for a large part of the commerce of the United States. Thus interior manufacturers and agriculturists are continually sending their products to New York for sale. The money paid for these products is, of course, paid through the banks. On the other hand, the interior is continually buying articles of merchandise in New York, and the money paid for these articles is paid through the banks, so that there is a constant inflow and outflow of money. The Wall Street man watches this movement keenly, as on it may depend the course of the stock-market. If New York is sending to the interior more than it is receiving, the banks are losing cash, and there will be a contraction of loans, unless the loss to the interior should be counterbalanced by imports of gold or heavy Treasury disbursements. On the other hand, if the balance is in favor of New York the banks should be gaining cash.

The Street is not content to wait for the bank statement for knowledge of the movement of money. The exports and imports of gold are generally known soon after arrangements are made for the shipments. Daily statements are given of the receipts and disbursements of the Treasury, and fairly complete statistics of the interior movement are obtained during the week by inquiry at the leading banks, which have large dealings with interior institutions.

During the year 1911 the following movement of money into and out of New York was reported to Dow, Jones & Co., from data supplied by the banks:

Recapitulation Currency Movements 1911:
(000 omitted).

	Into banks.	Out of banks.	Banks gain.	Banks loss.
Interior	\$ 687,038	468,861	\$218,177	.....
Gold	92,998	6,008	86,990	.....
Sub-Treasury ...	911,966	1,159,960	.....	\$247,994
Total	\$1,692,002	\$1,634,829	*\$57,173	.....
* Net.				

The statistics for ten years are as follows:

	Into banks.	Out of banks.	Banks gain.	Banks lose.
1911	1,692,000,000	1,634,829,000	57,173,000	.....
1910	1,906,686,000	1,900,010,000	6,676,000	.....
1909	1,857,161,700	1,896,611,400	.....	\$39,449,700
1908	1,913,256,200	1,785,415,800	127,840,400	.....
1907	1,741,002,700	1,705,986,300	35,016,400	.....
1906	1,791,585,300	1,781,026,600	10,558,700	.....
1905	1,446,903,300	1,536,354,400	.....	89,451,100
1904	1,612,141,100	1,478,722,800	133,418,300	.....
1903	1,355,720,300	1,299,337,600	56,382,700	.....
1902	1,203,142,200	1,188,448,700	14,693,500	.....
1901	1,300,429,500	1,254,733,200	45,696,300	.....

Thus during the year 1911, \$1,692,002,000 came into the banks of New York through these various movements and \$1,634,829,000 went out of the banks in these ways. Of the three movements, that to and from the interior is the most interesting. The record by months in 1911 is as follows:

The Interior Movement in 1911.

	Receipts.	Shipments	Gain.
January	\$ 63,437,000	\$ 33,029,000	\$ 30,408,000
February	49,433,000	26,967,000	22,466,000
March	47,178,000	36,069,000	11,109,000
April	61,291,000	32,811,000	28,480,000
May	63,726,000	53,604,000	10,122,000
June	66,856,000	38,560,000	28,296,000
July	56,862,000	39,402,000	17,460,000
August	61,979,000	59,455,000	22,524,000
September	39,948,000	38,203,000	1,745,000
October	39,271,000	36,414,000	2,857,000
November	55,747,000	56,400,000	†653
December	81,310,000	37,947,000	43,363,000
Total	\$687,038,000	\$468,861,000	*\$218,177,000
* Net.	† Loss.		

In domestic as in foreign exchange there comes a time when balances have to be settled in cash. These settlements may be delayed by various causes. For instance, if rates for loans are higher here than in the interior, the interior institutions, instead of calling for the money due them, may loan it, in the New York market. Western loans in New York have become a feature in the money-market in the last few years.

An anxious period in the money-market is the crop-moving time. That is the period of the year when the grain crops of the West and the cotton crops of the South are being harvested and forwarded to the markets. When it is recalled that in 1910 there were nearly three and one-half billion bushels of corn, oats, and wheat, and more than five billion pounds of cotton produced, some conception may be had of the service the banks of the country performed in financing the harvesting of these immense crops. Not all the burden of this falls on the New York banks, but a heavy share of it does, and it takes a large sum of money out of Wall Street in the last half of the year. This movement requires shipments of currency, usually in bills of small denominations. The banks can send this money by express or registered mail or by telegraphic transfers through the Subtreasury. The latter is the more convenient and the quickest way, but is restricted to Subtreasury points. By depositing in the Subtreasury the amounts required to be shipped, that institution will telegraph to another Subtreasury to pay a similar amount to the bank which is to receive the currency in that city.

The crop-moving period often subjects Wall Street to a severe strain. The stock-market has more than once suffered from this cause, and the Treasury has been called upon to afford relief by buying bonds, in order to liberate money held in the Treasury and which can be got into circulation in no other way.

Mr. Paul M. Warburg of the great banking-house of Kuhn, Loeb & Co., in an address before the American Bankers' Association in 1911 said concerning the movement of money:

This overflow of money, which in times of ease floods New York, and which in times of need is withdrawn with such vehemence that it causes violent convulsions, is no blessing, but a source of danger to that city. While our present system makes New York the undoubted money center and gives to its banks a position of pre-eminence and predominance, this power is possessed only at the expense of a responsibility which, with our present system, in times of stress brings mortification.

This is very true, but the Wall Street system ought to be safe enough and elastic enough to provide, at the same time, for the varying needs of commerce and the full reasonable requirements of the securities market.

A great money-market like that of New York, as already noted, possesses many sources of supply of credit. High interest rates open the conduits through which streams flow from one or more reservoirs of credit. From the Transvaal to the Klondyke come new supplies of the yellow metal. Australian gold, imported into San Francisco, is instantly made available in New York by telegraphic transfer through the Treasury. Great banks in Chicago and other Western cities make direct loans in Wall Street on stock collateral or commercial paper. Europe, by a transfer of credit, loans its capital in New York, or, if the interest rates advance high enough, foreign exchange rates may decline to the importing point, and an actual stream of gold flows into the Street.

Bank of England Statement.—Wall Street not only watches its own bank statement, but so intimately connected have become all the markets of the world that it

also studies the statements of the big Government banks of Europe. The Bank of England statement is issued on Thursday, and the trained eye of the financier can read in it the conditions of the English money-market, which is the most powerful in the world. The Bank of England discount rate sounds the keynote of the international monetary situation.

CHAPTER XXI

SUBTREASURY AND ASSAY OFFICE

It has become almost an unwritten law of politics that no Secretary of the Treasury can be selected from Wall Street. The reason for this is obvious. Many people fear the power of the Street, and do not want it to have too strenuous an influence in the Treasury Department. Yet every Secretary of the Treasury, from whatever section of the country he comes, is inevitably brought into intimate relations with Wall Street. It is not meant by this that the Secretary engages in stock speculation or uses his official power to advance or depress prices. No such scandal as that has developed.* But there is the closest possible bond between the Treasury and the money-market. When the Government needs money for the purposes of war, it must come to the money-market for it. When it desires gold in order to maintain specie payments, it has to come to the Street for it. When it desires to refund its bonds at a lower rate of interest, the operation generally has to go through Wall Street. If, on the other hand, the business interests require relief which the Treasury is able to afford, it is mainly through Wall Street that the Treasury is able to let out a part of its surplus by means of payments for bond redemptions. In a score of ways the Treasury and the Street are brought into close contact.

* "The Secretary of the Treasury, by his control of the public debt, has no doubt means of affecting the markets; but I have never heard of any charge of improper conduct in such matters on the part of anyone connected with the Treasury Department."

PROF. JAMES BRYCE in "The American Commonwealth."

Assistant Treasurer.—The Secretary of the Treasury is the head of the three greatest institutions of Wall Street, the Subtreasury, the Assay Office, and the Custom-House. His direct representative in the Street is the Assistant Treasurer, who is a member of the Clearing-House, through which the Subtreasury makes its daily exchanges the same as a bank. In times of financial distress, it is customary for the Secretary to meet the leading bankers at the Subtreasury to consider measures of relief. The Assistant Treasurer is an official of higher standing than his title would indicate. He draws a salary even larger than that of the Treasurer at Washington.

Government Finances.—Through the Subtreasury flow more than one-half of the aggregate receipts and expenditures of the United States Government. Into it flow the receipts of the Custom-House, of the Post-Office, and of other large Government offices. Out of it flow the payment of interest on bonds, payments for pensions, and the manifold disbursements of the Government for army, navy, and other purposes. The Subtreasury is also the effective agency of the Government in the floating of new loans, in the redemption of bonds, and the larger financial policies of the Treasury Department. The high standing of the office of Assistant Treasurer is indicated by the character of the men who have held it since its establishment in 1846.

The establishment of the Subtreasury followed the fall of the United States Bank, and for sixty-six years it has been the basis of the Government's financial system. The office was established, with a number of similar branches of the Treasury in other large cities, pursuant to the Act of Congress of August 6, 1846. The purpose of the act was to safeguard the funds of the Federal Government, large amounts of which had been lost by

the failures of depositary banks in which the revenues were kept after the expiration of the charter of the second Bank of the United States in 1836.

Deposits in National Banks.—Until the creation of national banks by the act of June 3, 1864, not a dollar of government revenue ever went into a bank. The national bank act permitted such deposits where protected by adequate security; but the policy of the government varied as to the use of the permission; political prejudices, born in the forties, continued to influence the policy.

Hence, except in recent years, the major part of the Treasury's balance was usually kept in the subtreasuries. Accordingly when the balance was large, a substantial part of the country's money supply was locked up in the Treasury vaults, to the detriment of business. As far back as 1853, and periodically since that year, this process of keeping money out of circulation created stringency. The anomalous condition arose of having financial trouble when the country was at its most prosperous periods because then the Government's revenues and surplus were largest. The sole resource to relieve stringencies was the purchase of Government bonds before maturity at heavy premiums, obviously a wasteful policy.

Number of Subtreasuries.—There are nine subtreasuries in all, but the one at New York transacts fully two-thirds of the business, and carries the largest balance. In 1910 the gross receipts, including currency and coin received for redemption and exchange, amounted to \$1,809,451,848; the gross payments were \$1,888,336,995; the balance June 30, 1910, was \$150,210,685.

The greater part of the balance consisted of trust funds, chiefly coin held for coin certificates outstanding.

Influence on Money-Market.—Since the average re-

ceipts, or withdrawals of money are thus very large, the transactions have an influence on the money-market. Therefore it was determined some twenty years ago, that the public was entitled to know the extent of this influence, and the daily net cash receipts and payments have been published since. Thus bankers may keep advised of the situation created by Treasury operations; and the figures aid those interested in forecasting the weekly bank statement.

The New York Subtreasury is also the chief office for furnishing gold for export; this is obtained by bankers in exchange for gold certificates or in redemption of United States notes. When exporters prefer gold bars from the Assay Office, the transaction is made through a transfer in the accounts between the two offices.

Transfers of Money.—A very useful function of the subtreasuries is that of making speedy transfers of money between the leading centers. Having usually substantial balances in each of the offices, bankers and merchants may deposit cash at New York and have the amount paid out on telegraphic order at say New Orleans, Chicago, etc. These transfers are important in facilitating crop movements.

When San Francisco was destroyed by earthquake in 1906, this transfer system was a most beneficent means of providing funds to carry on the current business and for rehabilitation. The catastrophe had locked up the vaults of most of the banks; their credit in New York, however, was unimpaired and by means of transfers by wire, the Treasury funds in San Francisco which were accessible, were used to the amount of \$35,000,000.

The New York Subtreasury has been a member of the Clearing-House for the purpose of exchanging checks, since 1879. The laws, until recently, still required that a large part of the payments to the Government be made

in actual cash, which continued to aggravate the "locking up" process; but a law of 1911, operative June 1, permitted the acceptance of checks for Government dues, which are then "cleared," obviating the use of cash.

Archaic System.—Nevertheless in the opinion of those best qualified to judge, the Subtreasury system is regarded as archaic and calculated to breed dangerous conditions. Its abolition, and the substitution of a central bank agency, is hence advocated by most economists. If the present movement for a central reserve organization should prove successful, this abolition may be accomplished.

The work of the Subtreasury includes the receipt of money due the Government from any source; the largest single item of this character is the customs revenue collected at the port of New York. Direct receipts of internal revenue are small, since the bulk of these funds is deposited in banks; but since the banks are required to transfer such receipts to a subtreasury when the sum held exceeds the security, and most of them prefer to transfer by drafts on New York, a very large part of the internal revenue from all over the country finds its way to the New York Subtreasury. Postmasters also deposit their receipts there; national banks all over the country use New York drafts to make payments due by them on account of their note-redemption funds, taxes, etc.

The greater part of the many disbursing officers and paymasters of the Government have accounts at the New York office, drawing checks aggregating many millions annually; interest on the debt is also paid here and when bonds are redeemed it is done by checks of the Treasurer.

Much of the work arises from the exchange of money; thus gold and silver is received for certificates and coin is paid out for certificates and notes; small silver, nickel and bronze coins are taken in and notes given in ex-

change, and such coins are given out for notes and larger coin.

The Subtreasury comes in direct contact with Stock Exchange houses that deal in Government bonds in the business connected with the transfers of registered bonds, for which purpose a separate division exists.

Trained Work.—The work requires trained men, expert money counters and accountants; they must be familiar with the many laws governing the operations. Practically the entire body of employés under the sub-treasurer is placed under the civil service law, and positions are held during good behavior. The fact that the enormous transactions have been conducted without loss is evidence of the faithfulness and efficiency of the employés.

The regulations require that a report be forwarded to Washington each day of the transactions of the previous day, stated by kinds of money, sources of receipt and channels of disbursement; with a balance sheet in which in addition to the kinds of money in hand the denominations of each kind are set forth. Thus the Treasury is informed daily of the supply of one-cent pieces, five-cent pieces, dimes, etc., in the vaults; it rarely happens that the accounts do not prove to a cent.

Assay Office.—The Assay Office is a branch of the United States Mint, and, as its name indicates, it receives and assays deposits of gold and silver and returns the same to the depositors in the shape of bars, or the Government will give coin for the value of the gold. An interesting book could be written about the Assay Office, its methods of melting and refining, and its marvelous scales, which are so delicately adjusted that they can weigh one-half of one hair of a person's head. It is from this office that the exporters of gold obtain most of the yellow metal for shipment; and it is in this connection

that the Assay Office becomes an important part of the mechanism of Wall Street. In this office we are confronted with the evidence of the dual character of gold as money or a medium of exchange, and as merchandise, an article itself bought and sold the same as pig-iron. The Assay Office makes two kinds of gold bars for sale: small bars varying in value from \$100 to \$700, which are bought for use in the arts and sciences; and large bars varying in value from \$5,000 to \$8,000, which are used for the export of the precious metal. These bars are stamped with weight and fineness as ascertained by the assay. Exporters pay 4 cents per \$100 for them, but even at this cost the bars are cheaper than coin would be.

The coin can be obtained without premium at the Sub-treasury on presentation of legal tenders, but coin is inferior to bars for export, because more easily abraded. The stamp of the United States on a coin is effective only within our own boundaries. As soon as the coin reaches a foreign country, its value is determined not by the stamp upon it but by its weight. So, when we are compelled to pay our debts by a gold shipment, the gold, whether it be bars or coin, is weighed and its value ascertained. Coin loses value by handling. Even new coin carried in bags loses value by abrasion during the trip across the Atlantic. It is stated at the Assay Office that if a bag of gold coin is put on the scales and weighed, then lifted on to the floor, and then immediately put on the scales again, the mere movement which this simple operation has involved will cause an abrasion such as will show a difference in weight. Bars, on the other hand, can be easily handled without much, if any, friction. When they arrive on the other side there is little loss in weight. In a big gold shipment this means much.

Some objection has been made to the policy of the Government facilitating gold shipments by the sale of these

bars. But in answer to this it is argued that when we owe money to Europe and our creditors demand payment, we must pay, whatever the cost of shipment. If our own Government increases the cost of obtaining the gold for payment, that makes no difference to our creditors, but it does to us as the debtors, because it makes our burden and expense greater. In facilitating shipments, therefore, we are not doing a favor to Europe, but to ourselves. The Treasury, indeed, suspended the sale of bars for several years, during that perilous period when the Government was struggling to maintain its gold reserves. But the situation has been changed by the enactment of the Gold Standard Law of 1900, and the breaking of the endless chain of greenback redemptions.

The Assay Office occupies one of the oldest buildings in Wall Street, but it is now being completely reconstructed. It was erected in 1823, and was for many years occupied by the New York branch of the United States Bank. After that it was leased to private bankers, but in 1853 was purchased by the Government and was first occupied by the Subtreasury. What is now the Subtreasury building, with its Greek façade and its eight Doric columns, was built by the Government on the site of the old Federal Hall for the Custom-House, which occupied it until 1872, when that branch of the Government was removed to the Merchants' Exchange Building, and the Subtreasury took its place. It is one of the most imposing structures in New York, and no other is so rich in historical associations. On the stone steps of the Subtreasury there stands a statue of Washington, in commemoration of his first inauguration. The very stone on which the Father of his Country stood on that occasion is preserved inside the building. The statue was unveiled in 1883 by Governor Grover Cleveland, and President Arthur and George William Curtis made ad-

addresses. Six years later the Centennial of the Inauguration was celebrated there, with addresses by President Harrison and Chauncey M. Depew, and an ode by Whittier. Many memorable public meetings have been held in front of the Subtreasury, and it was there, in 1865, during the excitement that followed the news of Lincoln's assassination, that James A. Garfield gave utterance to the ringing sentence, "God reigns and the Government at Washington still lives."

REFERENCES

- "The Independent Treasury of the United States and Its Relations to the Banks of the Country," David Kinley, 1910, National Monetary Commission S. No. 587.

CHAPTER XXII

FOREIGN EXCHANGE AND THE BALANCE OF TRADE

The foreign exchange transactions of Wall Street are of enormous extent, but, as already said, there are no statistics by which they can be measured. The volume of the foreign commerce of the United States is, of course, accurately ascertained, but the financing of this forms only a part of the foreign exchange market.

Foreign exchange is not merely a mechanism by which the money of one country is converted into, or exchanged for, the money of another country. It is a system of credits by which one country liquidates its indebtedness to another, and this indebtedness may represent:

- a—Raw or manufactured products purchased;
- b—securities bought;
- c—interest upon capital invested abroad;
- d—money borrowed;
- e—expenses of travelers;
- f—freights and insurance.

The mechanism of the exchange market supplies facilities by which payments are made for these several things by means of various forms of paper which, under different names, perform, in foreign transactions, practically the same service which checks, drafts, notes and commercial paper do in domestic transactions.

Among the bills issued in foreign exchange are “commercial bills,” which are drawn upon foreign purchasers of American merchandise, as for instance cotton and grain, or upon banks designated by them, and which are generally accompanied by bills of lading and insurance certificates, but sometimes without this protection;—

“security bills” which cover purchases of securities;—“finance bills”^{*} which are unsecured and are drawn by bankers who thus use their credit to obtain money, and these bills are employed freely in times of financial strain;—“letters of credit,” which are sold to travelers, enabling them to draw money from designated bankers in foreign countries; and “cable transfers,” by which transfers of credit are made by cable instead of the slower process of using the mails.

^{*} The issuing of finance bills is without doubt one of the most intricate forms of foreign exchange business, but as it is a practice which is carried on to a perfectly enormous extent and has an important bearing on all money-market questions, at least an idea of what the business is, is essential. The finance bill is simply a 60 or 90 day bill of exchange drawn by an American banker on some banker in London with whom he has an understanding regarding such transactions. If the credit of both houses is good the American banker will have no difficulty in selling the bill in the exchange market and with the proceeds he can do as he likes, knowing, however, that the finance bill he has set afloat will be immediately remitted to London, “accepted” by the bank on which it is drawn, and 90 days later will be presented for payment. The London banker who has “accepted” the finance bill when it was first presented to him knows that before the bill falls due and he has to pay it he will be provided with the necessary funds by the American bank which issued the finance bill on him.

The whole transaction in fact is equivalent to the American houses raising money on an unsecured note which has been made payable in a foreign country. The advantage to a house whose credit is good enough to do this business is evident. In a sudden high money-market in New York, for instance, millions upon millions are raised by the sale of finance bills. For “accepting” the bills the foreign banker charges a commission of course and the American drawer of the ninety-day finance bills (from the sale of which he received only the 90-day rate) has to cover their maturity at the end of 90 days with demand exchange, but these charges are trifling in comparison with what he can earn on the money in the meantime if the money-market happens to be really high.

American finance bills discount better in the London market than those drawn from any other country, a circumstance which is materially responsible for the extensive way they are issued whenever money rates rise. The London banks like to be drawn on in this way, because there is a good commission in the business, and they are not required to put up a cent of money, knowing perfectly well that at the end of ninety days “cover” to meet the maturity of the bills will be provided by the New York banker who set them afloat.

FRANKLIN ESCHER in “Dun’s Review.”

The greater part of the commerce of the world [says Muhleman in "Monetary and Banking Systems"] is paid for by the drawing of bills of exchange which are classed as commercial bills; a portion, however, is paid for by the remittances of bankers' bills. The commercial bills are usually payable at a future date—say sixty or ninety days with us, much longer periods with other mercantile nations. Bankers discount these, paying the shipper of commodities at once; brokers make it a business to collect them for bankers, and there are regular market prices for them. Thus sterling bills (i.e. payable in £) were quoted on a given date at 4.83½ for sixty-day paper which was the price bankers were willing to pay for them. The difference between this price and \$4.86½, the parity, represents the discount or interest for sixty days, the cost of collection and a slight margin for profit.

The buying and selling of these various kinds of paper constitutes the main business of the foreign exchange market, and in doing this it practically serves as an international clearing-house, for it offsets one debt by another, and thus by a series of eliminations reduces to a comparatively small sum the amount of actual money which one country is compelled to pay to another country, and even the liquidation of that amount may be delayed by methods of deferred payments.

Simple as are the basic principles of foreign exchange, it becomes so intricate in all of its ratifications over an area as wide as the world itself, involving transactions as great as the volume of the world's international commerce, that comparatively few have a complete grasp of its details. Many experienced bankers even are unable to calculate the profit of a gold shipment. International banking-houses have difficulty in training their clerks in this branch of their business. The young men can be taught to do one or two routine things, but as far as any large comprehension of the subject, that is difficult to learn. The writer is informed that the leading ex-

perts in foreign exchange are men trained in the German and French universities. The subject is so large that it can be treated in this chapter only in its general outlines.

In primitive times all trade was a matter of barter. An ox was exchanged for a horse, a camel for a slave, etc. Then money was invented as a medium of exchange. The bill of exchange was another step in advance. It became burdensome, expensive, and perilous to transfer a sum of money over a considerable distance in settlement of every transaction. It was discovered to be easier and cheaper to make such settlements by transfers of credits. Thus was evolved what is known as the system of domestic and foreign exchange, domestic applying to exchanges within one's own country, and foreign to exchanges with other countries. Foreign exchange is more complicated, because each country has a different coinage, and a transaction in foreign exchange therefore involves both a calculation of the difference between coins and of the relative position of the two countries as regards credit.

Misconceptions.—Many popular misconceptions exist as to foreign exchange. A common misconception is that it means simply an exchange of the coin of one country for the coin of another. It does mean that, but it means much more. An exchange of coin is what has been called the nominal exchange. Gold is the basis of the monetary systems of both England and the United States, but the dollar is the basis of the latter's coinage, and the pound of England's coinage. If one owed a debt in England he would have to pay in English money, as American coin is not legal tender there. So it would be necessary for him to exchange his American dollars for English pounds. The value of the two coins in an international transaction depends not upon the Government's stamp upon them, but upon the amount of gold in them. This is deter-

mined by an assay. The equivalent in American money of £1 sterling is \$4.8666. But in paying a debt in England the money may have to be transported there. This involves cost of freight, insurance against loss, and other items of expense.

State of Credits.—The actual rate of exchange depends not only upon the difference in the value of the coin, but upon the state of international credits. For the real exchange is the payment of a debt by a transfer to one's creditor of a debt due from another person. For instance, if A in New York owes B in London £5,000, and C, also in London, owes A a like amount, A liquidates his indebtedness by transferring to B his credit with C, who pays the money to B, thus avoiding two shipments across the Atlantic from C to A and from A to B. Imagine, if one can, a state of things in which every international debt had to be paid by an actual transfer of coin. Half the ships would be carrying merchandise and the other half gold in payment therefor. The expense and the loss would be prodigious. Commerce, of course, would be impossible, in the modern sense. But by bills of exchange this is obviated.

Bills of exchange are written orders drawn by one person on another who owes him money, generally for merchandise purchased from him, directing him to pay a specified sum at a specified time to a specified person. The form of a bill of exchange is similar to that of a draft, the difference between the two papers being that the draft is an order generally, not on a debtor, but upon a bank or some other custodian of funds belonging to the person drawing the draft. Bills of exchange are negotiable, being transferable by indorsement the same as drafts and checks, and increasing in strength by every additional indorsement. They become, therefore, articles of merchandise like the products whose sale produced them.

Bills of exchange are thus bought and sold like wheat or cotton or stocks.

Europe is constantly buying American products and American stocks, and as the United States is always purchasing European cloths, wines, and other goods, there is never a time when one country has not debts to be paid in the other. There is therefore a constant output of bills of exchange and a steady demand for them. Hence has sprung up a class of bankers who find it profitable to deal in these bills, buying from some and selling to others. The Chicago merchant who sells a cargo of grain in England draws a bill of exchange on the purchaser in London and discounts or sells it to a bank. The merchant in Worth Street having purchased a line of English cloth in London, may buy a bill of exchange to pay the debt. Some bills are drawn to be paid at sight on demand, and others at sixty or ninety days. When made payable at some future date, the bill must be presented at the earliest possible time to the person on whom it is drawn, who writes "Accepted" across its face. Naturally the value of a bill depends upon the strength of the names on it. Bankers also draw their own bills on their foreign credits and sell these in the market.

International Clearing-House.—The foreign exchange market is thus, as has been before said, a vast international clearing-house. The transactions of commerce are cleared by this system of transfers of credit just as the transactions of inland trade are cleared by the bank clearing-houses. If our indebtedness abroad is heavy, there is a big demand for bills and the rate of exchange advances. If the rate advances to a certain point, however, it may be found cheaper to ship gold than to buy the bills. If, on the other hand, the balance of trade is in our favor, and the volume of our European credits is greater than our debts, the supply of bills is larger

than the demand. The rate therefore falls, and if it falls far enough gold is imported.

“It might seem,” says Jevons, in his work on the “Mechanism of Exchange,” “that in the use of checks internally and of bills of exchange externally, we have reached the climax of economy in metallic money, but there is yet one further step to take. Let us imagine that merchants all over the world agree to keep their principal accounts with the bankers of any one great commercial town. All their mutual transactions could then be settled among those bankers. An approximation to such a state of things exists in the tendency to make London the monetary headquarters of the commercial world and the general clearing-house of international transactions.”

As London clears for the world, so New York clears for the United States. The bankers of Wall Street handle the machinery of exchange so as to provide with the utmost economy of time and expense for the payment of our indebtedness abroad, for the collection of our foreign credits, and for the payment of the expenses of American tourists by means of letters of credit, and all the other functions of international finance.

Balances to be Paid.—But, as in the exchanges of a clearing-house, there is always a balance to be paid. For, of course, in commercial intercourse of nation with nation, it can not be supposed that their transactions exactly clear each other. Foreign exchange provides a convenient method by which we pay for foreign merchandise with cotton and wheat and other American products. But these exchanges are not equal, and there comes a time when balances have to be paid. These balances are settled in gold. If it is a credit balance there is gold to receive. If it is a debit balance there is gold to pay. In clearing-houses the balances are paid at stated

times, usually every day. But in foreign exchange the periods of payment are irregular and may be long deferred.

When the balance has to be paid there is a gold shipment, for gold, not valued as coin but as bullion, is the only thing that will be accepted in payment of an international balance. But the time of payment is regulated by various influences which often appear very occult. Gold shipments are controlled by the rates of exchange, but these rates are controlled by the supply of and demand for bills. This supply and demand depend on the state of trade between the United States and Europe, and various other factors in international finance, such as foreign investment and foreign travel.

Influence of Money Rates.—But gold shipments are also regulated by another powerful influence, namely, the rates for loans. Money always moves to the point where there is the most profitable use for it, where the rates for loans—the matter of security being equal—are highest. This is true as between different parts of this nation, and it is also true as between different countries. In one sense, there are no boundary lines in finance as there are none in art. London, Paris, Vienna, Berlin, New York—the movement of money between these great cities is controlled by laws quite distinct from the political and racial barriers that separate them. There is no tariff on credits.

If the rate of discount is higher in London than elsewhere, money is attracted there as iron to a magnet. New York may owe a vast sum of money to London, but an advance in interest rates in Wall Street will postpone the payment, for London may find it more profitable to lend the money here than to call it home where there is less eager demand for it. A few years ago it was said that Berlin was lending money in New York, the differ-

ence in the profit of employing the money here over that of use in Berlin being at that time 2 per cent. In 1911-12 the reverse operation occurred; New York loaned vast sums in Germany.* Therefore the mechanism of foreign exchanges includes within it this system of foreign loans.

Thus, an advance in rates of money generally weakens the rates of exchange, and a decline in money strengthens the exchange market. In May, 1902, to take an illustration, the foreign exchange situation foreshadowed gold shipments as the rates approached closely to the usual export point. But by reason of the interior demand for currency, and an expansion of loans through speculation and syndicate operations, money became scarce, and the rates advanced to 10 and 20 per cent. Immediately there was an avalanche of sterling loans. Europe found it more profitable to loan out her credits in Wall Street than to call for payment. Immediately rates of exchange fell and the stringency in money was reduced. These foreign loans postpone the day of settlement of balances, but as borrowed money must be paid back some time, there comes a day when the debit balances must be settled. The creditor finally demands his money.

* "Because of the much more attractive rates offered for money abroad, the total outstanding advance made to foreign markets by American lending institutions probably exceeds to-day \$150,000,000. In other words, the volume of these credits created in favor of our banks on the other side is already at the high level of last year, and if the movement continues, it is fair to assume that the figures in the near future will break all records. Such a situation seems to be inevitable, unless the expulsion of capital should be immediately checked. In this way, the American money-market has become much the cheapest in the world, and the situation here is protected by the fact that we will be in a position to draw gold against this huge foreign credit fund, should unexpected need develop on this side. This is a really extraordinary situation and shows that for at least a considerable portion of the present year the foreign money-market will be virtually in the hands of American bankers. This is only another instance of the fact that money invariably seeks the dearest market, or that which bids the highest rate."—
"Fourth National Bank Circular," February, 1912.

Here we touch upon another subject concerning which there is much popular misconception. There is a great deal heard about the "balance of trade" as being in favor of one country or another, and as if that controlled the movement of gold. If the United States exports more than she imports, there is a balance in her favor, and if other things were equal, there would be an importation of gold. But the exports and imports of merchandise constitute only one item in the international balance-sheet.

Balance of Trade.—The balance of trade* is a term over which economists have been quarreling for two hundred years, and they are still at it, for involved in it is the issue of protection and free trade. J. B. Say says that a misconception on this subject was responsible for fifty years of commercial wars, which were carried on because nations thought that the sole object of commerce was to acquire the precious metal. The profits of commerce were valued only as they brought in gold and silver. If one nation bought more than it sold of merchandise, it had to pay specie for the balance, and was therefore said to have lost wealth. just as the other nation which had sold more than it bought, had gained wealth. The idea that neither side lost in an exchange of commerce, but that both sides gained, was overlooked, and everything was sacrificed in an endeavor to check merchandise imports and force exports.

While the theory of the balance of trade no longer controls the policies of the nations to the extent it once did, it still has a powerful sway, and to-day an exportation of

* "The term 'trade balance' is generally used for the purpose of indicating the excess value of a country's exports of merchandise over the value of its imports of merchandise, or the excess value of a country's imports of merchandise over the value of its exports of merchandise. In monetary circles the term is employed to denote the ability of a country to import supplies of the precious metals."

GEORGE PAISH.

gold is regarded by multitudes as a national calamity, as being a loss of national wealth. If a man pays \$20,000 for a house he is no poorer than he was before. He has merely exchanged one article of value for another article of value. And so a shipment of gold is only one of a multitude of exchanges of products that are going on between the people of the different nations. Europe loses no wealth by paying gold for American wheat, for though gold perishes not, and wheat is consumed, the wheat as food is transformed by the alchemy of the stomach into that bodily and mental strength which enables Europe not only to live, but to achieve wealth in other forms.

In Wall Street, however, a gold shipment is dreaded, because it decreases the loaning power of the banks, by reducing their reserves, which regulate the amount of their credit capacity. In this way a gold shipment may cause much injury to the home market. As a matter of fact the great banks of Europe are constantly competing for the new gold which comes from the mines as well as for the old gold which may be drawn from other countries in payment of balances.

Foreign Commerce.—But even Wall Street is prone to exaggerate or misconceive the significance of the balance of trade. In the fiscal year ending June 30, 1900, the total foreign commerce of the United States amounted to \$2,244,424,266, and if there had been no mechanism of exchange, this business would have called for the actual transfer between the United States and other countries of that amount of gold, which would, of course, have been a physical impossibility. But by the use of bills of exchange, the great bulk of the transactions were cleared one against the other, so that the amount of gold actually required to be exported and imported in payment of balances was only \$92,839,943, and this in settlement of financial as well as trade balances. In that year

the excess of merchandise exports over imports amounted to \$544,541,898. If the movement of merchandise was all that controlled the movement of gold, there would have been an importation of just that amount of gold into the United States which would have produced a panic in Europe. But, as a matter of fact, we exported \$3,693,575 more gold than we imported; in other words, instead of the rest of the world being indebted to the United States, as the trade balance indicated, we were actually in debt, and thus exported an excess of gold. In the next fiscal year of 1901 we imported an excess of \$12,866,010 gold, but our trade balance favored us to the amount of \$664,592,826. It is therefore clear that the movement of merchandise between this and other countries constitutes only one of several factors controlling the movement of gold.

During the five years ending December 31, 1910, the United States enjoyed an excess of merchandise and silver exports amounting to \$2,233,684,213. In the same time it received a balance of \$77,767,291 gold imports in excess of the gold exports. The difference between these two sums amounting to \$2,155,916,922, represents invisible items in foreign exchange.

It is comparatively easy for an individual to ascertain whether his credits exceed his debits or not, but it is often difficult to ascertain the true position of a nation. Former Secretary Hay has been quoted, in another chapter, as declaring that in the past five years the United States has become a creditor nation; but that was largely a figure of speech,* an expression of a belief in the ap-

* In an address to the Manufacturers' Association of New York, O. P. Austin, Chief of the United States Treasury Bureau of Statistics, said: "The fear that has been expressed that the maintenance of a large excess of exports over imports would disastrously affect national financial balances throughout the world has not up to the present time been realized, and under present conditions does not seem likely to be realized. The large favorable balance of trade is

proaching financial supremacy of the United States. It is noteworthy that in 1911, by virtue of its heavy loans abroad, this country was, in a sense, a large creditor of Europe. It may seem strange that there should be obscurity on so vital a question as this, but the fact is that while we have official Government statistics of merchandise, and specie exports and imports, there is no certain way of ascertaining the volume of other international transactions. Many estimates are given, but they are merely approximations. Even the Government statistics of the value of merchandise imports report less than the actual value, because a large though uncertain amount of imported goods is undervalued, in order to escape payment of *ad valorem* duties. Still, it is important for a man of large affairs to keep track as best he may of these blind items in the nation's account current with the rest of the world.

International Exchanges.—Every year the United States, to mention the leading items, has to pay other countries:

1. For her importations of their products.
2. The freight charges on merchandise carried in foreign vessels for American account.
3. The interest and dividends on American securities owned by foreigners or by Americans making their homes abroad.
4. For securities sold by foreigners in our markets.

being redistributed to the world, partly by American tourists, partly in payment of freights on international commerce, partly in payment of the earnings of foreign capital invested in the United States and interest on American securities held abroad, and partly in the liquidation of those securities; but until that foreign indebtedness, which is still estimated at perhaps \$2,000,000,000, is cancelled and the United States becomes a creditor instead of a debtor nation, there seems no reason to suppose that a continuation of a large excess of exports over imports will prove a condition to be deprecated."

5. The traveling expenses of American tourists in foreign countries.

6. The remittances of foreign born citizens to relatives and friends abroad.

Every year the United States is due to receive from other countries:

1. The sums paid for our agricultural and manufactured products sold abroad.

2. The money brought by immigrants.

3. The outlays of foreign vessels in our ports.

4. The traveling expenses of foreign tourists in our country.

5. The freight paid for merchandise in American vessels in the foreign trade.

6. The sums paid for purchase of American securities and other American investments.

While Europe is vastly our debtor in the exchange of products, we are vastly her debtor on all the other items of the international balances. For instance, nearly all of our commerce is carried by foreign vessels. In 1910, only 8.7 per cent. of all the imports and exports were carried in vessels flying the United States flag. Therefore we have to pay other countries for carrying our commerce. Then, the United States is a nation of tourists. In the fiscal year of 1910, 1,441,228 passengers arrived in the United States from other countries, but 243,191 of these were United States citizens returning from travel abroad; only 156,467 were foreign tourists and business agents intending to travel in the United States; the rest, 1,041,570, were immigrants. In 1909 there were 244,800 cabin passengers departing from the United States. The amounts paid by Americans abroad are largely in excess of the sums paid here by foreign tourists and brought here by immigrants.

About twenty years ago William Dodsworth made a

painstaking effort to arrive at a just estimate of the various unknown items in the problem of the balance of trade. He computed the debtor items as follows: Investment account, \$90,000,000; traveling credits, \$47,000,000; inward freight charges for American vessels, \$24,777,000; outward passenger fares per foreign steamships, \$8,698,000; undervaluations of imports, \$5,000,000; total, \$175,475,000. The creditor items were: Money brought by immigrants, \$14,000,000; outlays of foreign ships in ports, \$8,250,000; port outlays of passenger steamships, \$6,600,000; outward earnings of American vessels, \$1,900,000; total, \$29,750,000. The debtor balance was \$145,725,000, outside of the movement of merchandise and of securities. During the seven years from 1887 to 1893 the excess of merchandise and specie exports was \$524,000,000; and the debtor balance on the other items was \$1,015,000,000, leaving a debtor balance of \$491,000,000, which was presumably settled by transmission of securities.

This indicates the method of computing the invisible items in international exchange, but the estimate itself needs of course to be corrected by more recent figures.

George Paish, editor of the *London Statist*, in an article published in 1910, estimated that the United States pays other countries in interest upon foreign capital invested here \$250,000,000 net; in expenses of American travelers abroad over expenses of foreign travelers in this country, \$170,000,000; in remittances to friends in Europe, \$150,000,000; and in ocean freights \$25,000,000. Thus, according to this estimate, the United States has a balance of nearly \$600,000,000 which must be paid for either in gold, or in excess merchandise exports. It has been shown that the invisible items of foreign exchange in five years (1906-1910) amounted to \$2,155,916,922, which is an average of about \$431,000,000, so that allow-

ing for deferred payments (through loans) and other occult items, Mr. Paish's estimate is undoubtedly approximately correct.

Gold Shipments.—Enough has been written to indicate the laws that control the movement of gold in settlements of international balances. The gold, however, is not always shipped directly to the country to which we owe it. For instance, we may be indebted to Germany, but ship to France, because Germany owes a balance to that country, and a shipment to France thus satisfies two debts at once. Or we may owe England, but ship to France, because England is willing to lend the money there. Thus we hear of a "triangular transaction" in exchange, which is a movement involving three countries.

The shipper of gold has a comparatively simple problem to solve. He treats gold as an article of merchandise. He ascertains what it costs him in New York; what will be the expense of packing, of carting to the steamship wharf, of transporting to Europe, of insuring against loss; what will be the loss of interest in transit, etc.; and then he ascertains what he can sell the gold for in London or Paris, as the case may be. If there is a profit, the gold is shipped. A profit of \$200 on a shipment of \$1,000,000 has been said to influence a shipment. Sometimes, when there is not a legitimate profit in gold exports, they may be forced by an offer of some premium or extra inducement, for, as has been indicated, gold moves to the point where it is most wanted. Of course, the same rules that regulate gold exports apply to gold imports.

One of the largest shippers of gold furnished the author with a statement of the method of calculating the profit or otherwise of a shipment to Paris.

If foreign exchange, he says, rises to a certain point, it becomes more profitable to remit gold (which has a fixed price in most of the principal countries) to meet

obligations than to remit exchange. On the other hand, if exchange declines to a certain point, it may become preferable to import gold than to draw exchange against credit balances abroad. Taking for example a gold shipment to Paris, it has to be taken into calculation that the Bank of France pays 3,437 francs for 1 kilo fine gold, and that the United States Assay Office sells bar gold at the price of \$20.67183 per ounce fine plus 40 cents per \$1,000 premium. As 1 ounce is equal to 31.1035 grammes, \$1 bar gold would bring in Paris 5.16936 francs. Deducting about \$2 per \$1,000 expenses, the net receipt in Paris for \$1 bar gold would be about 5.1590 francs. It therefore results that if exchange in New York is such that less than 5.1590 francs can be obtained for \$1, it is cheaper to ship gold than to remit exchange.

This is of value as being the calculation of a practical man trained in foreign exchange, and not of a mere theorist. Formerly most of the gold exported was in coin, which was transported in bags.* But considerable value

* The following calculation of a gold shipment to London based on coin (American eagles) is taken from *The Journal of Commerce and Commercial Bulletin* in 1902:

"An American eagle weighs 258 grains or .5375 oz. troy. In \$1,000,000 worth of eagles, therefore, of exactly full weight, there would be 53,750 ozs. The Bank of England will buy American eagles at a fixed rate of 76s. 4½d. per oz. (sometimes a little more). At that rate 53,750 ozs. of eagles (allowing nothing for abrasion) would yield £205,201. The charges on a shipment of gold to London vary with each shipper and these are trade secrets which are jealously guarded. In a rough way, however, it costs about \$3,000, or £600, to ship \$1,000,000 gold to London. The following formula shows roughly the result of a shipment of \$1,000,000 of eagles of exactly full weight:

"\$1,000,000—53,750 ozs.—which yield.....£205,201

Charges—

Freight, $\frac{5}{32}$ of 1 per cent.....	£317
Insurance, $\frac{1}{22}$ of 1 per cent.....	93
Interest, 10 days, at say 3 per cent.....	171
Cartage, cooperage, say \$100, or.....	20

Total£601— 601

Net yield of shipment.....\$204,600

"A shipment of \$1,000,000 eagles on the above basis, then, will

was lost by abrasion, and an allowance had to be made for this in all calculations. For a number of years the United States would not sell the gold in bars, but now supplies bars at the Assay Office at a slight premium. The shipper packs them in the rear court of the Assay Office in casks, with sawdust to prevent abrasion.

Sterling Loans.—Sterling loans are loans made on bills of exchange.

The object of making sterling loans is to obtain money on time at a cheaper rate than the one ruling in the domestic market. The *modus operandi* is as follows:

The banker draws sixty- or ninety-days sight bills on London, which he either hands over to the borrower, indorsed in blank, who then sells them in the market, or he himself sells them in the market on behalf of the borrower, to whom he delivers the proceeds. After the lapse of sixty or ninety days the borrower has to repay to the

realize £204,600 net. This means that every pound sterling costs (1,000,000 divided by 204,600) \$4.8875. If this were all the story, then, so long as demand sterling could be bought at less than \$4.8875, there would be no inducement to ship gold.

"But owing to the so-called 'triangular' operation, or to special concessions offered by the receiver of the gold, it is often practicable to ship gold to Europe when demand sterling is selling below \$4.8875, or even below \$4.88."

The following is taken from the *Wall Street Journal* of Sept. 13, 1905:

"The price of bar gold 11-12 fine in the London market at present is 77s. 9½d. per ounce. The mint price of coined sovereigns is 77s. 10½d. per ounce. There is no coinage charge in the United States so that the difference of 1½d. between the open market price of British standard gold bars amounts to about 2.72 cents profit on the ounce of fine gold purchased in London and sold at the New York assay office. In a million dollars there are 48.377 ounces fine gold and at 2.72 cents per ounce the profit would be \$1.315. The difference between 4.85, the price at which demand sterling sold early on Tuesday, and the par of exchange, 4.8665, is 1.65 cents per pound sterling. Taking for convenience £200,000 as the equivalent of \$1,000,000 the difference is \$3,300. Add to this the profit on the gold, \$1.315, we have \$4.615 as the gross profit. From this is to be deducted the expense of importing the gold which varies from 3-16 to ¾ of 1%, or on a million dollars from \$1.875 to \$3.780."

banker the loan at the current rate of sterling exchange. If the borrower wishes to calculate what rate of interest the money will cost him, he has to figure as follows. As an example we will take a sterling loan of £10,000 for ninety days:

If the rate of exchange obtained for the bills was 484	
(for £1) net, i.e., free of brokerage and revenue	
stamp, the borrower would receive	\$48,400
Of this he has to pay the banker say $\frac{1}{2}$ per cent. com-	
mission	242
	<hr/>
Making the net proceeds	\$48,158

If the rate of exchange at which the borrower has to repay the banker were $486\frac{1}{2}$, he would have to pay \$48,650 for the original loan of \$48,158, so that the result is that he pays for interest \$492, which is equal to 4 per cent. per annum.

REFERENCES

- "The A. B. C. of Foreign Exchanges," George Clare, 1893.
- "Money and the Mechanism of Exchange," W. Stanley Jevons, 1876.
- "Bullion and Foreign Exchanges," Ernest Seyd, 1868.
- "Commentaries on the Law of Bills of Exchange," Joseph Story, 1853.
- "International Exchange, Its Terms, Operation and Scope," A. W. Margraff.
- "Foreign Exchange," Franklin Escher, 1910.

CHAPTER XXIII

PRIVATE BANKERS AND UNDERWRITING SYNDICATES

The great bankers are the great leaders in commerce and industry. They are to-day the world's constructive statesmen. The best brains developed in the last half century have gone not into war, or politics or law, but into business, and the broadest of all business, because comprehending every other, is that of banking.

It has been said that no European nation could go to war without first consulting the Rothschilds, so dependent are all governments on the money power in times of national crises, when the ordinary revenues are insufficient and extraordinary loans are required. The bankers then are called upon to supply the "sinews of war."

When we speak in Wall Street of the "private bankers," we refer to the handful of great banking-houses whose operations are on an international scale, and which in the United States represent the same power that the Rothschilds have so long possessed in Europe. These houses may, like J. P. Morgan & Co., Kuhn, Loeb & Co., J. & W. Seligman & Co., Speyer & Co., and Brown Bros. & Co., be closely allied by partnership ties to other powerful firms in other cities; and represent here the great firms and institutions of Europe, just as August Belmont & Co. have long represented the Rothschilds.

Function.—The private bankers transact a general banking business much the same as the incorporated banks do, but free from many of their limitations. They make call and time loans, buy and sell mercantile paper, and engage extensively in all foreign exchange opera-

tions. They act as fiscal agents for corporations and associations. They are dealers in investment securities. They often conduct important operations in the stock-market. They underwrite new issues of stocks and bonds for railroad and other corporations. They undertake the reorganization of insolvent or embarrassed railroads. Of recent years they have been especially prominent in the promotion of immense industrial companies. They are at once bankers, brokers, dealers in foreign exchange, promoters, organizers, and underwriters. Their methods of business differ little, if any, from those already described. The main difference lies in the scope and magnitude of their transactions, which are steadily expanding. The deposits and corporate connections of two or three of these private banking houses make them take rank with the most powerful banking institutions in the world.

Field of Operations.—Their field of operations is, indeed, as wide as the world. Their business in London and Paris and Berlin almost as much as it is in New York. This is especially true in recent years, when the expanding commerce and financial power of the United States have placed the country in the company of the world's "great powers," a competitor of Great Britain and Germany, and a factor in the now pressing problem of the Orient. The private bankers are intimately connected with and influential in the railroad and the big industrial corporations which engage in the principal branches of trade. When it is said that one banking-house in Wall Street is influential in the management of railroads having one-fourth of the entire railroad mileage of the United States; that it is a powerful factor in the Boards of Directors of the greatest banks and trust and insurance companies; that it is one of the directing forces in the coal and iron trade, and has close alliances

with leading corporations in copper, express, and electric light; and that the par value of the securities of the various companies with which it is identified in one way or another is nearly one-third of all the securities dealt in in the New York Stock Exchange, some idea is formed of the magnitude of the operations and the extent of the influence of the private bankers of Wall Street. Whether such power as this is good or bad, depends upon the manner in which it has been acquired and in which it is administered; and while power always arouses violent jealousy and opposition, yet it is the judgment of everyone who has made a close study of the Wall Street system, that not only has the growth of the private banking houses been a legitimate evolution in finance and commerce, but that it has transgressed no laws of State or economics; and while it has been a power exercised for private profit, it has also been exercised for the public benefit. Even their latest critic admits that "they have exercised the power with exceptional justice and self-restraint."

Mr. Morgan is the only man in the world thus far to deal in billions of dollars, as he himself may fairly be said to be the greatest personal product of the Street. His unquestioned leadership in American business has been achieved by his wonderful force of character and brilliant judgment. Mr. Morgan's own account of the business of the private banker is therefore of supreme interest, it being the account of an expert. In his testimony of March, 1902, before the special examiner in the suit against the Northern Securities Company, the following dialogue* took place between him and the lawyer examining him:

Q. You are J. P. Morgan, senior member of the firm of J. P. Morgan & Company? A. Yes.

* Report of testimony in the *New York Tribune*.

Q. Would you mind telling us the nature of the transactions of J. P. Morgan & Company? A. We deal in railroad securities and other securities and adjustments—anything in the financial line that is creditable and might suggest itself to the firm as profitable.

Q. Does the firm ever engage in any speculation on its own account? A. Not to any extent.

Q. They would not, for instance, purchase \$78,000,000 of stock of a railroad for their own account? A. Probably not. We might if we thought it desirable.

Q. Their business is to deal in stocks and other securities for the benefit of their customers? A. Yes.

Q. And then by financing any good enterprises that might present themselves? A. If they wished to do that.

Q. And they would, for instance, loan money for that purpose? A. Yes.

Q. For their own account or the account of others? A. I don't feel that I ought to be called on to answer that question.

Q. The relations of your firm as bankers to the Northern Pacific have continued since 1896? A. Yes, we have been their fiscal agents.

Q. To save time, tell us what that means—what you did for them. A. Whatever they required in a financial way.

Q. You mean to say that all their financial business was conducted through your house? A. No, we were their New York representatives, and we are to-day.

Q. So that if the Northern Pacific issued any new stock since that time it would be financed through your house? A. It would. At least, I should expect it.

Q. And if it was necessary to raise money for the building of extensions and improvements, or for the purchase of large lines, these transactions would probably be financed through your house? A. I would expect them to be.

Q. Of course, the detailed financial matters of the road would be handled by others? A. Of course.

Q. But all these large matters would be handled by your house? A. I should so expect them to be.

Q. And the Northern Pacific has from time to time paid for this service? A. I think so.

Q. Every time an underwriter's syndicate is formed there is a commission paid to the banker and some profit to the underwriter? A. Not always. (Laughter.)

Q. That is the usual custom? *A.* We should expect it to be. Otherwise the transaction would not be made.

Q. You would expect to be paid for your services? *A.* Not always.

Q. When you negotiate for a railroad don't you make it pay you? *A.* Not always.

Q. You sometimes do it without any consideration? *A.* We do. It may not be desirable to make a charge. It depends on the nature of the transaction. In a great many cases no charge whatever is made.

Q. You do that work for nothing? *A.* We do it for nothing.

The international banking-houses touch business at every possible point of contact. They may settle rate wars and labor strikes. They shape, subject to the same natural laws which govern all human beings, the destinies of the markets. When two of the great banking-houses clash, the result is like the eruption of Mont Pelée or a collision between two planets. Such a clash shook Wall Street from top to bottom in the memorable panic of May, 1901. Upon the consummate ability and integrity of these bankers depend in large measure the growth, the stability, the prosperity, and the happiness of the country. Before them we stand in the presence of what is called "high finance." On important occasions, when a public statement is expected from J. P. Morgan & Company, a throng of brokers and reporters gather around the doors of the firm, anxious to get the earliest possible information. A meeting of the Cabinet at Washington does not excite more interest than a "conference at Morgan's."

Underwriting.—There is one special function of the private bankers which needs explanation. They underwrite new issues of securities either by established corporations or by newly organized companies. To underwrite is to insure. A company desires to raise, say, \$50,000,000, and to do this, issues bonds secured by a mortgage

on its property. It possesses no facilities for selling these bonds to the public. It must place the bonds, or float the loan, as the phrase is, through a banking-house, which either underwrites the issue itself or, if it is too large for its own resources, forms an underwriting syndicate. A syndicate is a combination of capitalists united for the purpose of prosecuting an enterprise requiring a large amount of money. The underwriters agree to take the entire issue of securities; that is to say, they insure it, being prepared to pay for every bond that is not sold to the public.

It is scarcely necessary to say that this is an operation often involving great risks. The underwriters must be men of large capital, extensive resources, wide and influential connections, and thorough understanding of the markets.

Nothing is more important in issuing new securities than to know when is the best time to issue them. If the market is flooded with new securities, if there has been an overproduction of stocks and bonds, if the demand is sluggish and prices are declining, the time is unpropitious for a new issue. It has been said that only once in a generation would a combination of conditions exist favorable to such a stupendous enterprise as the organization of the United States Steel Corporation.

Numerous underwriting syndicates are formed composed of weak material, and managed by adventurers in finance who have little to lose and much to gain. These are generally unable to carry the enterprises they have undertaken to insure, and the result is a crash in which many innocent victims suffer.

Allusion has been made to the United States Steel Corporation. A syndicate was formed to underwrite this. It was estimated that it might require \$200,000,000 to float the huge company. The syndicate pledged itself

to furnish that sum. A first installment of \$25,000,000 was called, and paid in to the managers of the syndicate. No official statement is made to the public of such operations. They are considered private business, and even subscribers to a syndicate may know little about its affairs beyond the fact that they put in so much money and draw out so much profit. But it has been announced that in the case of the Steel syndicate it was so successful that not only was \$25,000,000 all that was necessary to be paid in of the \$200,000,000 pledged, but that this sum was paid back to the subscribers in addition to many millions of dollars in profits.

Great as are the profits, they are generally no greater than the risks involved. The United States Steel Corporation at one time determined to retire \$200,000,000 of preferred stock and issue \$250,000,000 of bonds in its place. It was announced that the underwriting syndicate would guarantee \$100,000,000 for this operation and receive 4 per cent. commission on the amount of the bonds actually placed. The syndicate would thus have a prospective profit of \$10,000,000 if the entire issue should be sold, and one-fourth of this, or \$2,500,000, would go to the banking-house managing the syndicate.

The general rule governing the underwriting of new securities is that the syndicates shall receive a commission of 5 per cent. on the value of the securities underwritten. Let us return to the illustration of a railroad issuing \$50,000,000 of bonds. The railroad, it may be presumed, is of good standing, and the security excellent. The company prefers, instead of securing a high premium on the bond, to save in the annual interest charges. So it issues a $3\frac{1}{2}$ per cent. bond, with the possibility that it will sell at par or perhaps higher. The underwriters agree to take the entire issue, say at 98, but it charges a commission of 5 per cent., or about \$2,500,000, for the

labor, expense, and risk attending the operation. The railroad is now secure. It is assured of the money it needs, for which it has, indeed, paid a liberal discount, but no more liberal proportionately than would be required in procuring a modest loan in the ordinary market channels. The syndicate must now sell the bonds. If there is an active investment demand it may be able to accomplish this at once, at a considerable advance over the underwritten price of 98. Suppose it sells at 102, the syndicate would then reap a profit of 4 per cent., or \$2,000,000 in addition to the commission of \$2,500,000, less, however, the cost of advertising, wages, attorneys' fees, and other expenses. But if the demand was not as great as had been anticipated, the syndicate might find itself with millions of dollars securities on its hands, for which it must pay, but for which there is no adequate market. The big private banker has, however, in his connections with banks and corporations and bond houses such facilities for disposing of securities that the success of a new loan is practically assured as soon as he has taken hold of it.

In large operations the underwriting syndicate often forms a subsyndicate, or practically a blind pool, the members of which take a certain part of the risk involved, with a right to a proportionate share in the profit, less a usual commission of 5 per cent. to the managers. It is through some such arrangements as these that great companies are formed, big loans floated, reorganizations and consolidations effected, and immense enterprises made possible.

There has been much said in criticism of the sums paid to bankers and syndicates as commissions for the marketing of securities for corporations. But the risk is often as great as the possible profit, and in other cases where there is a minimum of risk, coupled with a maximum of

profit, the charge made by the banker corresponds in a measure to the fee of the great specialist in surgery, who may charge \$5,000 for an operation taking only five minutes and involving no special labor to himself. But the patient pays not for the time and labor of the surgeon, but for his years of training and superior skill and knowledge. So in finance; if the corporation desires the services of the great specialist, it must be willing to pay the price demanded.

In some cases the underwriting syndicate is paid wholly in stock; for instance, in the underwriting of the securities of a big company organized some years ago it was reported that the syndicate would receive in stock an amount equal to 55 per cent. of \$50,000,000 of bonds it would guarantee.

In nearly all syndicate operations, especially when the formation of a new company, or the reorganization of an old one, is involved, the services of a legal adviser are required. The corporation lawyer is thus one of the important adjuncts of a private banking-house, and sometimes he is even made one of the partners.

CHAPTER XXIV

PANICS

Born in a boom and cradled in a panic, the history of the stock-market has been that of an alternation of booms and panics. The order of events is this: There is first a period of prosperity in business, based on good crops and a sound condition of the markets. Confidence prevails, credit is excellent, manufactures flourish, new enterprises are encouraged, expansion sets in. This induces an active speculation. The people are prosperous, and they are led to invest a part of their surplus earnings in stocks. The public takes possession of Wall Street. The volume of Stock Exchange transactions increases. Prices advance by leaps and bounds. New issues of securities are absorbed quickly. There seems to be no limit to the upward movement. Then overspeculation and its attendant evils follow. Credit is unduly expanded. Recklessness and dishonesty corrupt the markets. Suddenly some event unforeseen, except, it may be, by the most experienced eyes, takes place. It comes in the form of a calamity. It strikes the stock-market when its resources are expanded to the utmost. The inflated values collapse like a punctured balloon. Panic seizes the Street. Credit is withdrawn. Money is hoarded. The banks contract their loans, forced liquidation sets in, weak houses are driven to the wall, failures are announced, general bankruptcy is threatened, the Clearing-House is obliged to issue loan certificates for the protection of solvent firms temporarily embarrassed,

mills and factories close their doors, thousands of laborers are thrown out of work, and distress is universal. After this follows a long period of stagnation, from which the country and the Street, slowly and painfully, emerge into a new era of good times.

Definitions.—A boom is a prolonged bull movement. A panic is a convulsion in the markets, causing a contraction of credits, a collapse in prices and failures in business. A distinction, however, needs to be made here. The word panic is overworked like many other words. It is commonly used to describe two very different things. Thus, we speak of the panic of 1893, and of the Venezuelan panic of December 19, 1895. But the former was a prolonged commercial crisis, involving the business of the whole country, the baleful effects of which were felt for years. The latter was a sudden paroxysm of fear, involving a crash in the stock-market, but scarcely felt outside of Wall Street, and which lasted only a day or two. Prof. W. G. Sumner speaks of a panic as “a wave of emotion, apprehension, and alarm which is more or less irrational.” Such was the Venezuelan panic. It was produced by fear of war with England. The fear was caused by a sentence in President Cleveland’s message. The war never broke out and the fear of it passed quickly away.

Nine Crises.—There have been nine commercial crises, involving practically the whole country, since 1812, or an average of one every eleven years,* so that in the past hundred years there have been alternating periods of financial distress and financial prosperity, each period averaging about five and a half years. But in addition to these great financial crises there have been many

* Which coincides closely to the estimate made long ago by Jevons.

panics and semi-panics, most of them confined to Wall Street, but felt with severity there.

Using the word panic, however, in its common meaning as applying to both kinds of monetary convulsions, the national and the local, the commercial and the speculative, it may be instructive to enumerate briefly these successive shocks to business.

Phenomena of Credit.—There have been periods of business depression such as are produced by crop failures, wars or other disasters from the earliest times, but panics in the modern sense are a product of the system of credits and speculation. They might be said to be the price paid by world of industry for these two great agencies by which increased power is given to commerce, just as steam and electricity have given increased facilities for international communication. The first panic resulting from the misuse of credits and speculation was what is known as "the Mississippi bubble" in Paris in 1719; and a study of the history of this dramatic incident in French history will well repay the student of financial phenomena. It is much more instructive than the South Sea bubble in London which was almost contemporaneous with it, for the latter was conceived in fraud, while John Law, the promoter of the Mississippi scheme, discovered the secret of the power of banking credit, and hoped by means of this to restore the depleted finances of France, only he was carried off his feet by the very power he had invoked, and he attempted to raise a building of ten stories on a foundation intended only for two. All credit and speculative panics, though differing in details and in effect upon the general welfare of the world, closely follow the outlines of this original great panic.

Commercial crises are, however, much more funda-

mental to the productive and conservative forces of the nations. The greatest economists have for years been studying the phenomena of these crises and there is now a vast body of literature relating to them. No one in charge of large affairs can afford to be wholly ignorant of their history; yet as a matter of fact every generation of business men seems to be surprised at the outbreak of each new panic; and it is perhaps to the fact that each generation has to learn for itself the business laws which underlie the stability of business enterprise, and learn these lessons by actual experience rather than by study of the past, that we owe in part the periodicity of panics.

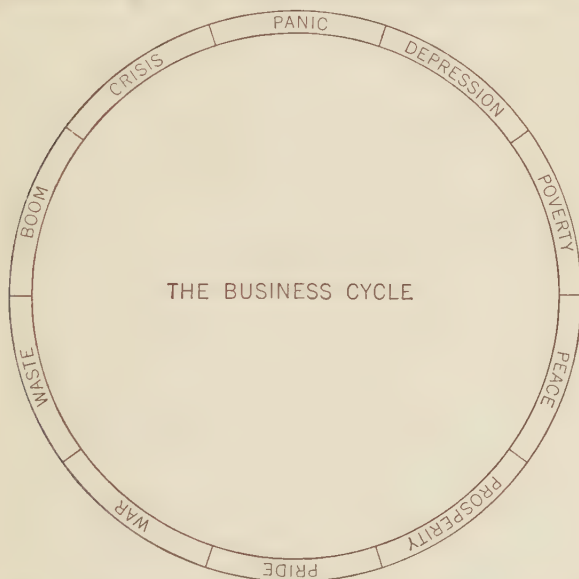
Cycle Theory.—The “cycle theory”* of commercial crises is accepted by most students of economic phenomena. This theory is that these convulsions come at fairly regular intervals of about ten years; for instance, great panics about every twenty years and generally a smaller crisis midway between two big collapses of credit. Nothing is more interesting to the financial student than a study of this subject from the standpoint of the cycle theory, although one should thus approach the theme with caution, for the theory, useful as it is in a degree, can be easily overloaded until it breaks down.

Of the fact that the history of the world travels in a series of curves and circles there are abundant illustrations, and this is particularly true of economic history. The accompanying diagram reveals this truth.

* “Mr. John Mills, who has so ably treated of credit cycles, attributes the periodic variations to mental action. A commercial panic, he holds, is the destruction of belief and hope in the minds of merchants and bankers. But though I agree with him so far, I can see no reason why the human mind, in its own spontaneous action, should select a period of just 10.44 years to vary in. Surely we must go beyond the mind in its material environment.”

W. STANLEY JEVONS.

Starting with business depression, a long period of this leads inevitably to poverty. Capital suffers from diminished profits and labor from reduced wages or lack of employment altogether. When a people are poor they cannot afford to war among themselves or with their neighbors. Peace therefore reigns, and peace gives time and opportunity for recuperation and advance. There-



fore out of peace springs national prosperity. When this has lasted for some time, it results in individual, corporate and governmental luxury and pride; and pride leads to clashes of ambition and to war. War is waste, though its immediate effect is to promote speculation, inflation and a boom. This appearance of great prosperity is however fictitious. It is like "the house built upon the sands"; and the inflation of credit and excessive speculation inevitably produce the crisis which surely ends in the panic.

Forecasting a Crisis.—This cycle may take more, or sometimes less, than exactly the twenty years, which seems to be the period between one great panic and another, but every generation of American history has seen one such revolution as this; and by expert analysis of financial and trade statistics it is possible to trace with considerable accuracy the various steps in the cycle, and even to indicate the probability of the approach of a new crisis. Taking, for instance, the statistics of bank clearings and business failures, and bringing them together in order to show the extent of business disaster to the volume of business transactions, a diagram has been prepared by R. G. Dun & Co., which is here reproduced and which reveals in a striking manner the approach of danger. The diagram covers a period of twenty-one years, including the two big panics—1893 and 1907. The line represents one dollar of liabilities of defaulting concerns in the United States to one thousand dollars of bank clearings.* The high peaks of this line of disaster represent panic. The line covering the period from 1890 to 1900, shows most vividly the great crisis of 1893, that year of panic; and the less sensational but nevertheless

* DEFAULTED LIABILITIES PER \$1,000 EXCHANGES—BY QUARTERS.

	First.	Second.	Third.	Fourth.	Year.
1911.....	1.50	1.12	.93	1.26	1.21
1910.....	1.63	.96	1.17	1.11	1.23
1909.....	1.18	1.08	.68	.80	.92
1908.....	2.52	1.60	1.69	1.09	1.68
1907.....	.77	1.04	1.35	2.48	1.36
1906.....	.81	.73	.59	.80	.78
1905.....	.85	.73	.62	.66	.71
1904.....	1.89	1.25	1.26	.88	1.28
1903.....	1.14	1.15	1.37	2.02	1.42
1902.....	1.20	1.11	.86	1.02	.99
1901.....	1.09	.69	.97	1.11	.95
1900.....	1.53	1.95	1.54	1.44	1.61
1899.....	1.12	.62	.83	1.26	.97
1898.....	1.91	2.21	1.56	1.92	1.89
1897.....	3.87	3.43	1.68	2.18	2.69
1896.....	4.47	3.16	6.38	3.95	4.37

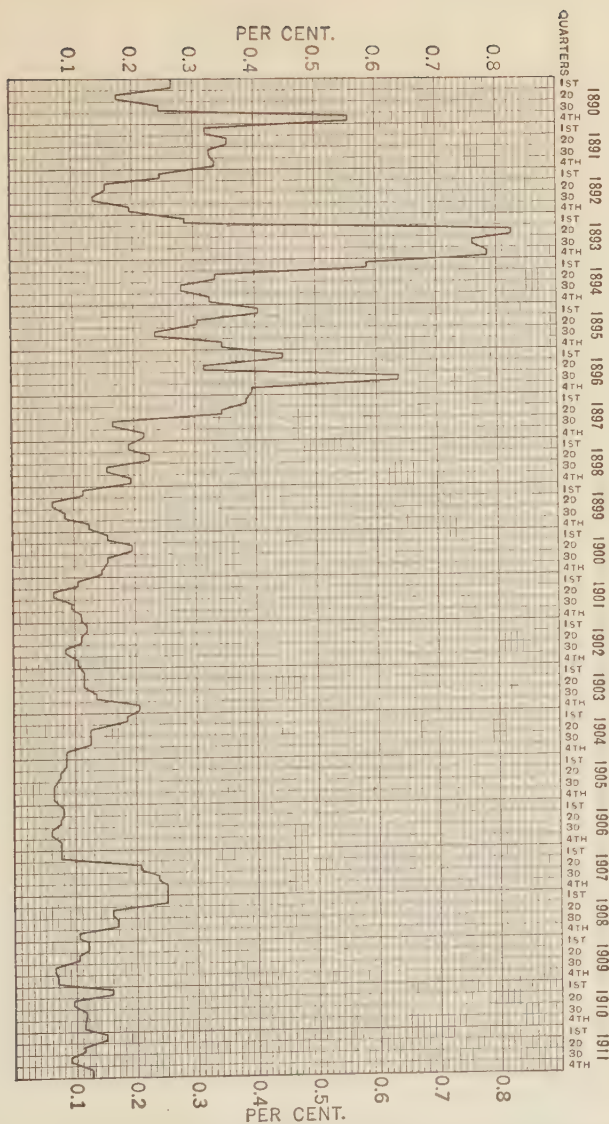


DIAGRAM SHOWING ONE DOLLAR OF DEFAULTED LIABILITIES TO
ONE THOUSAND DOLLARS OF BANK CLEARINGS

severe crisis of 1896 when the country was going through a campaign in which free silver was the issue. It shows by the rapid downward swing, the quick recovery in 1898 and 1899, after the election of McKinley. The line in the succeeding eleven years, from 1900 to 1911, shows how much more stable and even business conditions were in that decade as compared with the preceding; but in this diagram as in the other we see how the line of disaster rose in 1907-8 during the panic of that period.

It is methods of analysis like this that investigators use in studying the phenomena of panics for the purpose of ascertaining if there are signs of danger ahead.

Brief History of Panics.—Wall Street's first panic, if it may be dignified by that term, was in 1791-'92. The close of the Revolutionary War had been followed by a boom in business, both in England and the new American nation. This boom led to overspeculation, which in this country was in the new securities of the Government and in the stocks of the recently organized banks. "The period immediately succeeding the Revolutionary War," wrote William M. Gouge in 1833, "was in a peculiar sense an age of speculation." Distress and embarrassment followed, and to relieve the stringency in money, Secretary Hamilton bought United States bonds in the open market, thus releasing a stream of Treasury money. But the little panic did not last long, and for twenty years the United States enjoyed a period of marvelous growth.

The second war with England, in 1812-'14, precipitated the first great commercial crisis of the new country. The closing of the ports, the strain and expense of war, and abuses in banking were the causes of this crisis. Peace introduced another time of prosperity, which was interrupted by the short but severe panic of 1818, due largely

to overexpansion of credits by the United States Bank and other banking institutions. Much misery ensued, and the debtors' prisons were filled.

It was eight years before there was another panic, and in the meantime the nation, with all the vitality of youth, recovered from its financial illness and enjoyed wonderful growth and strength.

There was a panic in England in 1825, caused by two poor harvests and overspeculation in South American enterprises, and the following year the tide of disaster reached the United States. The Franklin Bank, the Marble Manufacturing Company, and other firms failed, and Jacob Barker suspended. This disturbance over, the country enjoyed many years of prosperity, broken, however, by temporary monetary upheavals in 1829 and 1831.

But in 1837 one of the greatest panics in the history of the country occurred. There had been a partial recovery from this, when another panic broke out in 1839, and there was another upheaval in 1841, due to the final failure of the United States Bank. The next panic was in 1848, but was not so disastrous. It was produced by the more severe crisis in England the preceding year, a crisis in one country nearly always causing a disturbance in another.

Eight years of financial calm and commercial prosperity followed, with immense expansion, due chiefly to the discovery of gold in California, but in 1857 panic, like that in 1837, burst upon the country almost without warning.

The period of the Civil War presented the characteristics of both panic and boom. Specie payments were suspended and the banks were obliged to issue loan certificates, but the enormous output of paper money produced all the effects of inflation. There was wild speculation and high prices, but the fearful strain of four years

of battles severely taxed the resources of business. Eighteen hundred and sixty-four is called the year of the war panic.

The failure of Overend, Guernsey & Company in England in 1866 produced a disturbance in Wall Street, but nothing like that experienced in London. Black Friday in 1869 was a Wall Street panic. The Chicago fire of 1871, involving a loss of \$196,000,000, and the Boston fire of 1872, involving a loss of \$80,000,000, also caused panics in the Street and much distress in different parts of the country. They were among the many things that brought about the great commercial crisis of 1873, from which both Street and nation suffered immense losses.

The resumption of specie payments in 1879 ushered in a memorable boom, but from the shooting of Garfield, in 1881, there started a gradual downward movement that culminated in the panic of 1884, which, in its worst effects, was confined to Wall Street, but which was felt to some extent all over the country.

The next panic was in 1890, as a result of the suspension of the Barings, of London. This was stopped from becoming a world-wide calamity only by the action of the Bank of England, which used its own resources and those of other institutions uniting with it to save the firm from utter failure. The New York Bank Clearing-House came to the relief of this country by a liberal issue of loan certificates. Wall Street was convulsed by the blow to credit inflicted by this event.

In this same year the Sherman silver-purchase bill was passed by Congress. While it was still under discussion in the national legislature, A. J. Drexel, the famous Philadelphia banker, said to the writer that it would cause the worst panic from which this country had ever suffered, a prediction fulfilled three years later. The panic of 1893 was caused by the fear that the United

States would go on a silver basis, and it did not end until the election of McKinley on a gold-standard platform.

The great convulsions of 1837, 1857, 1873, and 1893 were commercial panics of national scope. As a matter of fact, the effects of such crises are world-wide. All true panics are international. The American panics of 1814, 1818, 1826, 1831, 1837, 1848, 1857, 1866, 1873, 1884, 1890, and 1893 were closely preceded, accompanied, or followed by similar crises in Europe.

Following 1897 came years of plenty, interrupted by a stock flurry caused by the death of former Governor Flower and the early British defeats in the Boer War, the memorable stock panic of 1901 caused by the Northern Securities corner, and the severe liquidation of 1903—called the panic of “the undigested securities.”

There was no big commercial depression until the convulsion of 1907, which, although occurring only fourteen years after the 1893 collapse, presented all of the characteristics of a crisis of the first magnitude. It was the splendid and courageous leadership of Mr. Morgan, assisted by another Clearing-House Loan Committee, that prevented the 1907 panic from developing into a complete business collapse from which it would have taken the country years to recover; but though it fell short of being so grave a disaster, yet its effects upon the trade of the country were felt for several years.

Safeguards.—There seems to be no absolute safeguard against the great commercial crises. But there has been evolved a mechanism which checks their progress and minimizes their evil effects. This mechanism is supplied by the Bank Clearing-House. This is the country's breakwater against the waves of panic. By the issue of Clearing-House loan certificates, the banks are able without fear to extend credit to their solvent customers, and thus thousands of deserving firms are saved from failure.

But loan certificates do not prevent panics; they only check them. The very issue of loan certificates is proof that panic has begun. The very suggestion that certificates should be issued might of itself be sufficient to cause a panic. They are therefore an alleviation, not a preventive. They represent a measure adopted as a last resort. In nine great monetary convulsions they have performed an immense service to the country, but something better and more instantaneous is required.

No epidemic travels faster than fear, and most Wall Street panics are the result of fear. Generally the most that can be done is to establish a quarantine. If a panic can only be foreseen it may be stopped, unless indeed the trouble is too deep-seated. But the unexpected is always happening in Wall Street, and there may not be time to raise safeguards.

Still it does not take long to pull the lever of safety. Let us take a typical illustration. Nothing could have been more unexpected and terrifying than the shooting of McKinley. This took place, fortunately, after the close of the stock-market. One member of the Clearing-House Committee, J. Edward Simmons, was in the city. He took immediate steps to prevent the threatened panic. The next morning, before the stock-market opened, a meeting was held in the Clearing-House, attended by the leading bankers, at which a pool of \$30,000,000 was formed, and the announcement made that this sum would be loaned in the Exchange at market rates. Not a dollar of the money was used. The \$30,000,000 were not needed. The very assurance that the banks were ready and able to protect the market was sufficient to prevent any panic.

In times of monetary distress there is also another source of relief—the Treasury. Better, however, than any Treasury disbursement by redemptions of bonds

would be a new banking system providing for a more elastic currency. Such a system would be an added safeguard against the ravages of panic. The need of currency reform has long been felt, and at last the country seems to be preparing for it, although it may take persistent agitation and education to bring it about.

The present system of a bank-note circulation based on Government bonds, and of Government deposits in the banks also secured by bonds, is absolutely inadequate to the needs of the country. It is antiquated and inelastic. In times of financial distress it fails to furnish the needed relief. Speaking of the panic of 1893, former Comptroller of the Currency Hepburn in an address delivered ten years ago said:

The Government was powerless to afford relief. Our currency was as unresponsive to the wants of trade as the pyramid of Cheops. Some banks borrowed United States bonds from savings banks and other institutions and took out circulation, but no bank could buy bonds and take out circulation without aggravating instead of relieving the money stringency. What we need is legislation (or relief from legislation) that will permit banks to do within the law and under wholesome regulations precisely what the banks under stress of necessity did in 1893 in contravention of law.

Loan Certificates.—Mr. Hepburn argued that the time had gone by when the Clearing-House loan certificates could be safely availed of in the city of New York. They would, he says, materially impair our national prestige as a money power in the world of finance and depreciate our securities as a nation. They would materially injure the banking and commercial interests of the city.

Nevertheless it was found necessary in 1907 again to resort to Clearing-House loan certificates, although in that year and in 1906 upwards of \$200,000,000 of gold was imported. In the three months from October, 1907,

to January, 1908, an issue of \$101,060,000 Clearing-House certificates were issued in New York, and \$147,219,700 in forty-nine other cities, making a total issue in the whole country of \$248,279,700. The following is a complete record of loan certificates issued by the New York Clearing-House:

Historical Record of Loan Certificates Issued by New York Clearing-House Association.

First issue		Maximum issue	Aggregate issue	Final can- cellation
1860	Nov. 23	\$ 6,860,000	\$ 7,375,000	March 9, 1861
1861	Sept. 19	21,960,000	22,585,000	April 28, 1862
1863	Nov. 6	9,608,000	11,471,000	Feb. 1, 1864
1864	March 7	16,418,000	17,728,000	June 13, 1864
1873	Sept. 22	22,410,010	26,565,000	Jan. 14, 1874
1884	May 15	21,881,000	24,915,000	Sept. 23, 1884
1890	Nov. 12	15,205,000	16,645,000	Feb. 7, 1891
1893	June 21	38,280,000	41,490,000	Nov. 1, 1893
1907	Oct. 26	88,420,000	101,060,000	March 28, 1908
Total			\$269,834,000	

The words of Mr. Hepburn were true, the experience of 1907 demonstrating their correctness. Something better must be devised than Clearing-House certificates as a panic preventative. One of the results of the 1907 panic has been to bring about a substantial unanimity among the bankers of the country in favor of a Central Reserve Association along the lines of a plan suggested by the National Monetary Commission, of which ex-Senator Aldrich is Chairman.

To recapitulate:

There are two main classes of panics. 1. The commercial crisis, spreading over the entire country and involving every department of business. For this kind of panic there is now one principal mechanism of relief, namely, the Clearing-House loan certificates, which, as has been seen, are only an inadequate measure of the last resort. 2. The Wall Street panic, confined chiefly to the stock-market and playing havoc with prices of securities, but not, at least immediately, harmful to outside business. It is sometimes possible by a prompt application of the power of the money-market to check the progress of this kind of convulsion.

But it is urged by the financial experts that a new mechanism is imperatively demanded by the conditions of the country, a mechanism that will supply additional and safe currency when it is most needed, and that will be retired when there is no further use for it. This requires a large reserve held in some adequately protected and controlled institution. Such an institution is that of the Central Reserve Association proposed by the Monetary Commission. The creation of this Association would probably deprive New York of part of its present financial power, but on the other hand, relieve it of much of its present burdensome responsibility in time of stress and panic.

REFERENCES

- "A Brief History of Panics," Clement Juglar, 1897.
- "Financial Crises and Periods of Industrial and Commercial Depression," Theodore E. Burton, 1907.
- "Lessons of the Financial Crisis," Cortelyou, Vanderlip, Treat, Ridgely and Schiff, 1908.
- "History of Crises under the National Banking System," Dr. O. M. W. Sprague, National Monetary Commission, Senate Document 538. (Exhaustive on American Panics since and including 1873.)
- "Overproduction and Crises," Karl Rodbertus.

CHAPTER XXV

MANIPULATION AND CORNERS

Manipulation is of two kinds, these being well indicated by the Standard Dictionary definitions of the word: 1, adroit or skillful management; 2, fraudulent or deceptive management.

The latter is dishonest without qualification, and much of the odium which attaches to Wall Street is the result of this kind of stock manipulation, which, it may be said, is on the decline, due to restrictive and publicity methods. It consists mainly in the influencing of the course of prices by false reports. This is the only kind of manipulation that can be played by a small man. Any one can lie, and a lie has a wonderful power of communicating itself through the Street by a sort of wireless telegraphy. It is remarkable how many things one hears in the stock-market that "aren't so." These false reports generally have a temporary effect on prices. But a lie persisted in is almost as good as the truth. A false report, therefore, may be so often repeated that in spite of official denials many will continue to believe in it, on the principle that where there is so much smoke there must be some fire. In such a case the effect on prices may be prolonged. The laws of the State make it a penal offense to originate or maliciously repeat falsehoods for the purpose of injuring the value of another's property, but it is difficult to track a lie to its lair.

In a suit brought against members of a syndicate charged with fraudulent manipulation, the complaint thus described its operations:

Selling stocks to the public by improperly spread "tips" and alleged information.

Procuring loans from banking institutions throughout the country on stocks having fictitious values.

Procuring the purchase of stock by means of alleged customers furnished to various stock-brokerage houses throughout the country. The said customers would deposit on margin with the brokers a small proportion of the purchase price of the stocks, and these brokers would immediately buy for their supposed customers' account the stocks required, paying the syndicate's agents the full price thereof, these brokers advancing the difference from their own funds between such purchase price and the amount of margin deposited with them by their supposed customers.

Tips and Wash Sales.—In other words, by false tips and matched orders or wash sales the manipulators endeavored to establish fictitious quotations for their stocks. If, for instance, the security was actually worth only \$50 a share, and by this means its market price was established at \$120, the manipulators might be able either to sell to innocent investors at nearly 150 per cent. profit, or to obtain loans from country banks for amounts largely in excess of true value. The late Bishop Potter, in an address at Yale, said truly: "The capitalist whom no honest man can hold converse with is he who artificially depresses values to the injury or loss of his fellow directors, or who withholds information regarding the conditions of his company for his own personal advantage, or who by obscure bookkeeping deceives those whose money he holds in trust." He might also have added, "or who artificially advances prices to the injury," etc.

Manipulation and Diplomacy.—But there is a higher type of manipulation than this. It may be described as the fine art of buying and selling stocks to the best advantage. The high manipulator is the diplomatist of the

Street. The diplomatist never lies, but he sometimes makes the worst appear the better reason. He does not lie, but he conceals his purposes so as not to disclose his operations.

Secrecy.—Secrecy is, in fact, the first object of stock manipulation. It is quite impossible to tell in a few words how this is done. But it may be said briefly that the manipulator operates through several brokers at the same time. He may buy through some, and sell through others, so that no one, not even the brokers themselves, can be certain what his true position in the market is.* Let us suppose that the manipulator represents a pool which has a large amount of stock to sell. It would not do to throw it upon the market at once, nor is it advisable that the Street should know that the pool is selling. So it may be buying with one hand and selling with the other, being careful, however, to sell more than it buys, and thus in the course of time the whole amount may be disposed of. There may have been a loss on, say, 100,000 shares bought, but the profit on 150,000 shares sold may be so large as to make the entire operation very satisfactory to the members of the pool. In order to maintain the price of the stock it is trying to sell, the pool may find it necessary to buy other stocks, in order to give the general market the appearance of strength. Capitalists

* A story told of the late Charles H. Dow is a good illustration of this. Mr. Dow, who had a remarkable memory, had one afternoon a long interview with Jay Gould. While talking with Dow, Gould continued to give stock-market orders to a succession of brokers. This he did without any attempt to conceal what he was doing from Mr. Dow. He told one broker to sell this stock and another to buy that stock, and every few minutes he gave a new order as he stood calmly fingering the stock tape and gravely discussing public questions with his caller. Mr. Dow made a mental note of every order Gould made, and after he left he put them down on paper in regular order. Then he put his analytical mind to the task of discovering from this data whether Gould was a bull or a bear. But even Mr. Dow had to give the problem up, so skillfully had Gould covered his real purpose in a labyrinth of orders.

controlling a railroad system sometimes consider it essential to "support" the stocks of the system, as the credit of the railroad, its ability to borrow money, and the ability of its individual directors to obtain the means for large operations depend, in no small measure, on the market value of its securities. Likewise an underwriting syndicate which has undertaken to float a large issue of new securities is sometimes compelled to prepare the market to absorb them. This preparation may consist of an elaborate manipulation of both money- and stock-markets, so as to make rates for loans easy and prices of stocks attractive to investors and speculators. As a preliminary to a bull market it is often necessary first to clean out the weak holders of stocks and depress prices to a point where they look like bargains. The first act of a bull pool, therefore, may actually be to bear prices. If the manipulator seeks to accumulate stocks, he will of course try to break prices by a raid or attack on the market, which is accomplished by furiously selling short. Suppose the manipulator discovers that long stock is held in weak hands, and that there are many stop orders in the market. He may institute a bear attack in order to force liquidation, and uncover the stop orders, which, as has already been explained, are orders to sell when prices reach certain figures, generally marking the limits of the customers' margins. The manipulator may, and often does, strive to influence prices in New York by having orders cabled from London, so as to convey the impression that English investors are in the market. This often has the desired effect on prices.

Manipulation of the highest kind is a millionaire's game. It can not be played by the man of limited means. It requires command of immense resources, such, for instance, as James R. Keene possessed as a man of wealth himself and as the agent of capitalists and syndi-

cates of enormous power. The manipulator in stocks is like the manipulator in politics, who pulls the wires, which are generally underground, in order to control conventions and make nominations. But the politician, while thus engaged, can not entirely ignore the potency of public policies, and can not defy too long the will of the people, or he may be overwhelmed. So the manipulator in stocks, by pulling concealed wires and by a scientific arrangement of his forces as intricate and fascinating as a game of chess, is able to make prices. But he must nevertheless not go too far from the true basis of value, or even he may be overwhelmed in the market.

Manipulation at times plays an important part in stock speculation. For days and even weeks together the market may be in the hands of the manipulators. Difficult as it is to estimate values, it is still more difficult to fathom the intrigues of the manipulators. It is, however, generally possible to ascertain whether the market as a whole is subject more to professional than public control.*

Corners.—A corner is that condition of a stock in which the supply is held by one operator or by a clique of operators, and in which many have contracted to deliver to the operator or clique what they can obtain only from the operator or clique. This is a condition which results from the operation of selling short. For instance, the total issue of a certain stock may be 100,000 shares. A clique of operators have quietly acquired all the available supply, as well as 40,000 shares more, bought from speculators who, believing that the price was too high, have sold the stock short. It is obvious that when these shorts are called upon to deliver the stock they have sold, they find that they can buy only from those to whom they have sold, and are therefore caught in a vise. The only way

* See reference to Manipulation in Hughes Commission report.

of escape is by settling at a price fixed by the clique or by a repudiation of contracts, which amounts to failure. The victims of a corner are not generally entitled to much sympathy, as they have, with their eyes open to the risks involved, sold something they did not own.

Corners may be divided into two classes, one including those which are deliberately planned, and the other those which create themselves. The corner of 1901 in Northern Pacific, which advanced the price to 1,000, was of the second class. It resulted naturally from a contest for the control of the company between two great syndicates which bought the entire issue of stock. Meanwhile, other individuals had sold short what they did not own, and when called upon to deliver on their contracts, found that the market supply was exhausted, and that the two syndicates, having bought for actual control, wanted the stock and not a settlement of differences. The result was a convulsion in the market.

History of Corners.—Wall Street has had many corners in the past eighty years. The most famous of all was Gould's attempt to corner gold, which ended in Black Friday. Another celebrated corner was that in Hannibal and St. Joseph stock in 1881. This was conducted by John R. Duff, and was not successful, owing to the faithlessness of Duff's broker, who was expelled from the Exchange.

Soon after this deal the State Legislature appointed a committee to investigate corners, and its report covered several hundred pages, but resulted in no important legislation. As long ago as 1836 the Stock Exchange itself appointed a committee to investigate corners. There had been the year before two big corners. A clique bought up the stock of the Morris Canal Company much below par and compelled many shorts to settle at 150. There was a corner in Harlem the same year. There were only

7,000 shares then issued, and yet the pool was able to buy from shorts over 60,000 shares inside of two months, and compelled them to settle at high figures.

In 1863 and 1864 Commodore Vanderbilt's two celebrated corners in Harlem took place. In one he caught the city aldermen, and in the other the State legislators, short, and compelled them to submit to his terms. The corners grew out of a franchise to lay rails on Broadway, and the politicians thought that they held the key to the speculation, but they were beaten by one of the ablest men in American business. The Prairie du Chien corner in 1865; the corner in Michigan Southern in 1866; the many corners in Erie conducted by Drew and Gould; the corner in Northwest, engineered by Gould in 1872, when the shorts had to settle at 230, and when an attempt was made to deliver preferred stock on common stock contracts; and S. V. White's corner in Lackawanna in March, 1884—these are among the notable events in the history of speculation.

Corners in grain, cotton, and coffee have generally been failures. Even Keene failed utterly in an effort to corner the corn market. The reason is that the products are too large, and there are too many sources of supply, successfully to establish a monopoly. Still there have been a few successful corners in products, and it is related that one hundred and twelve years ago Ouvrard, a noted European speculator, succeeded in cornering first the paper and then the coffee market.

While manipulation and corners have not been and apparently can not be prevented, many of the grosser evils that formerly attended them have been reformed. The millennium has not arrived in Wall Street, but security and good faith abound there to a larger extent than they did thirty years ago.

CHAPTER XXVI

PESTS OF WALL STREET

The Wall Street district contains many men eager to capture the money of stupid people.* They are bogus brokers, tipsters, blind-pool sharps, and men who offer to sell you an infallible system for beating the stock-market. It was estimated some years ago that there were upwards of eight hundred bucket-shops in the United States. Some of these concerns went by the name of "Exchanges" and "Syndicates." Their number has been much reduced in recent years. Others advertise largely as "bankers," and maintain expensively furnished suites of offices. As Mr. Clews says, they are the "degenerates" of the Street. The government, through the Post-Office Department, and the organized exchanges, wage continual war upon them.

The Street has suffered severely in money and reputation from these pests of speculation. They certainly have done at times a heavy business, a part of which would otherwise flow through the regular channels of speculation. The outsider naturally identifies them with the legitimate operations of the Street. He supposes that they are a part of the system. But they are foul excrescences on the stock-market. They are practically of the same character as pool-rooms and policy-shops. They are gambling places, with this difference in favor of the gambling-house: there, one can at least see the dealer; but in these outside Wall Street concerns one enters a

* "At times a great many stupid people have a great deal of stupid money."
WALTER BAGEHOT.

blind pool, and he may or may not meet with fair treatment.

In the bucket-shop there is no actual transfer of stock or "intent to deliver." All that takes place practically is the registering of a bet on prices. This affords facilities for cheap speculation, and the bucket-shops are filled with clerks and other persons, women as well as men, of small salaries or incomes, all eager to double their money in the Street, and all inflamed by the stories told of the immense fortunes that have been made there. These are the very people who should keep out of the stock-market. They have not the means and the knowledge for successful operations there. Most people who enter Wall Street speculation are bulls, and the customers of the bucket-shops bet that prices will advance, so that the proprietors reap a golden harvest in a bear market. In a continuous bull market the bucket-shops generally shut up. They can make no money when their customers are winning. That is the difference between them and the Stock Exchange broker. The latter is most successful when his customers are making money. Every now and then the papers record the failure of one of these bogus firms. The real proprietors decamp, and all that remain are a few clerks, a set of office furniture, and a crowd of clamorous and angry customers. Most of the concerns have high-sounding names, sometimes imitating as much as possible the names of famous houses. Usually the men actually in control keep in the background. Under a law of New York the keeping of a bucket-shop is a felony.

Bogus Brokers.—Writing of bogus brokers, Francis L. Eames says, in his book on "The Stock-Exchange":

These people establish themselves in the neighborhood of Wall Street in large, imposing offices, with numerous clerks. By extensive advertising in the newspapers and by sending out vast quantities of circulars through the mails, large sums of money

are drawn from the public theoretically for speculation in stocks. The bogus broker is not connected with the Exchange, and no stocks are really bought or sold, though notices of purchase and sale are given to customers, usually without the names of the parties with whom the contracts are supposed to have been made. A favorite method is to induce people to enter into alleged syndicate operations or pools, and customers are told of the large sums that have been made in previous operations.

The Stock Exchange wages relentless war on the bucket-shops and bogus brokers, and has tried in every way to deprive them of its quotations, but they thrive in spite of all. A new crop of victims is harvested every year. The sublime credulity of some people when it comes to investing their money was signally illustrated in the case of Miller, the 520-per-cent.-Franklin-Syndicate man, who even after he was sent to prison for his swindle continued to receive money from persons in different parts of the country, asking him to invest it for them.

Senator Spooner, in a speech in the United States Senate, declared "that dealings in the bucket-shops constitute an insidious and destructive form of gambling." Yet Congress, in passing the war-tax repeal bill, would not retain the tax on bucket-shops, which had had the effect of reducing their number.

There is one way of differentiating between Stock Exchange and bogus brokers. The former, when they advertise, advertise only their names, their business, and their Exchange connection. In February, 1898, the Governing Committee of the Stock Exchange passed the following resolution:

RESOLVED, That, in future, the publication of an advertisement of other than a strictly legitimate business character by a member of the Exchange shall be deemed an act detrimental to the interest and welfare of the Exchange.

The London Stock Exchange not only prohibits adver-

tising by members, but itself advertises the fact in the newspapers as follows:

THE STOCK EXCHANGE

NOTICE

No Member of the Stock Exchange is allowed to advertise for business purposes, or to issue circulars to persons other than his own principals.

Persons who advertise as Brokers or Share Dealers are not Members of the Stock Exchange, or under the control of the Committee.

A list of Members of the Stock Exchange who are Stock and Share Brokers may be seen at the Bartholomew-lane entrance of the Bank of England, or obtained on application to

EDWARD SATTERTHWAITE,

Secretary to the Committee of the Stock Exchange.

COMMITTEE ROOM, THE STOCK EXCHANGE, LONDON, E. C.

This has the effect of marking a line of separation between legitimate and illegitimate brokers like that existing between reputable doctors, who do not advertise, and quacks, who do.

The bogus broker and tipster fill the advertising columns with their flamboyant appeals to would-be speculators. Advertising is expensive, but it must pay them. Some of the advertisements of the bogus brokers are indeed masterpieces of the art of ad. writing.

There are two things which a reputable broker or promoter or banker may do in order to protect himself against the evil of being identified in a public way with dishonest advertisers. He may not advertise at all, or else advertise only in such periodicals as absolutely refuse any bogus "ads" of any description. Advertising is so useful, and now almost indispensable a vehicle of publicity, that to abandon that field entirely to the dishonest seekers after other people's money is a sacrifice of oppor-

tunity. The thing to do is to prevent advertising from becoming a connecting link between a rascal and a fool, and make it a legitimate tool of enterprise.

What the Hughes Commission had to say regarding the abuse of advertising will be found on page 407.

Wall Street is too often judged by these bogus brokers, dishonest promoters, and tipsters. It would be fairer to judge it by such men of character and faithfulness to trusts as the late Frederick D. Tappen, of whom J. Edward Simmons, in a recent eulogy, said:

Not all the great battles of the world are won by the soldier. There are generals in finance as in war. There are heroes in the counting-house as well as on the battle-field; men who for honor and for duty stand firm, with undaunted courage, at the post of danger in the day of trial.

APPENDIX

THE HUGHES COMMISSION REPORT, WITH NOTES BY THE AUTHOR

Notwithstanding its great age, the magnitude of its transactions, and the vast importance of its market to the business of the country, it was not until 1909 that the New York Stock Exchange was made the subject of a governmental investigation. In that year Governor Hughes of New York appointed a commission to make an examination concerning speculation in securities and commodities, and he appointed as members of this commission nine well-known citizens, practical men of affairs as well as trained economists. The panic of 1907, like other panics, had its starting point in Wall Street, and the sharp and calamitous decline in prices of securities produced a feeling of antagonism to the Stock Exchange, an antagonism which was in part the result of certain exceptional speculative developments shameful in their character and injurious in their effects, and in part the result of political and demagogical agitation. The Hughes Commission was apparently appointed for the purpose, first of determining what justification existed for an organized market, where speculation could be carried on, and second of correcting such evils as might exist.

The report of this Commission, which bore date of June 7, 1909, is the most important document relating to speculation in securities and commodities which has ever been issued in the United States. It takes rank with the report of the Royal Commission which in 1877 made a similar inquiry into the methods of the London Stock Exchange.

The report of the Hughes Commission has already had the two-fold effect of causing the Stock Exchange to make material changes in its rules for strengthening the safeguards thrown around its market, and of modifying and correcting public opinion in regard to the economic soundness and value of speculation. So important and so comprehensive is the report that it appears necessary to reproduce it in full in this description of the Wall Street system. The report is as follows, the portions in brackets being notes by the author intended especially to show the subsequent action of the Stock Exchange with regard to the various recommendations.

New York, June 7, 1909.

Hon. Charles E. Hughes, Governor, Albany, N. Y.

Dear Sir: The committee appointed by you on December 14, 1908, to endeavor to ascertain

"what changes, if any, are advisable in the laws of the State bearing upon speculation in securities and commodities, or relation to the protection of investors, or with regard to the instrumentalities and organizations used in dealings in securities and commodities which are the subject of speculation,"

beg leave to submit the following report:

We have invited statements from those engaged in speculation and qualified to discuss its phases; we have taken testimony offered from various sources as to its objectionable features; we have considered the experience of American States and of foreign countries in their efforts to regulate speculative operations. In our inquiry we have been aided by the officials of the various exchanges, who have expressed their views both orally and in writing, and have afforded us access to their records.

THE SUBJECT IN GENERAL

Markets have sprung into being wherever buying and selling have been conducted on a large scale. Taken in charge by regular organizations and controlled by rules, such markets become exchanges. In New York city there are two exchanges dealing in securities and seven in commodities. In addition there is a security market, without fixed membership or regular officers,

known as the "Curb." The exchanges dealing in commodities are incorporated, while those dealing in securities are not.

Commodities are not held for permanent investment, but are bought and sold primarily for the purpose of commercial distribution; on the other hand, securities are primarily held for investment; but both are subjects of speculation. Speculation consists in forecasting changes of value and buying or selling in order to take advantage of them; it may be wholly legitimate, pure gambling, or something partaking of the qualities of both. In some form it is a necessary incident of productive operations. When carried on in connection with either commodities or securities it tends to steady their prices. Where speculation is free, fluctuations in prices, otherwise violent and disastrous, ordinarily become gradual and comparatively harmless. Moreover, so far as commodities are concerned, in the absence of speculation, merchants and manufacturers would themselves be forced to carry the risks involved in changes of prices and to bear them in the intensified condition resulting from sudden and violent fluctuations in value. Risks of this kind which merchants and manufacturers still have to assume are reduced in amount, because of the speculation prevailing; and many of these milder risks they are enabled, by "hedging," to transfer to others. For the merchant or manufacturer the speculator performs a service which has the effect of insurance.

In law, speculation becomes gambling when the trading which it involves does not lead, and is not intended to lead, to the actual passing from hand to hand of the property that is dealt in. Thus, in the recent case of *Hurd vs. Taylor* (181 N. Y., 231), the Court of Appeals of New York said:

"The law of this State as to the purchase and sale of stocks is well settled. The purchase of stocks through a broker, though the party ordering such purchase does not intend to hold the stocks as an investment, but expects the broker to carry them for him with the design on the part of the purchaser to sell again the stocks when their market value has enhanced is, however, speculative, entirely legal. Equally so is a 'short sale,' where the seller has not the stock he assumes to sell, but borrows it and expects to replace it when the market value has declined. But to make such transactions legal, they must contemplate an actual purchase or an actual sale of stocks by the broker, or through him. If the intention is that the so-called broker shall pay his customer the difference between the market price at which

the stocks were ordered purchased and that at which they were ordered sold, in case such fluctuation is in favor of the customer, or that in case it is against the customer, the customer shall pay the broker that difference, no purchases or sales being made, the transaction is a wager and therefore illegal. Such business is merely gambling, in which the so-called commission for purchases and sales that are never made is simply the percentage which in other gambling games is reserved in favor of the keeper of the establishment."

This is also the law respecting commodity transactions.

The rules of all the exchanges forbid gambling as defined by this opinion; but they make so easy a technical delivery of the property contracted for, that the practical effect of much speculation, in point of form legitimate, is not greatly different from that of gambling. Contracts to buy may be privately offset by contracts to sell. The offsetting may be done, in a systematic way, by clearing-houses, or by "ring settlements." Where deliveries are actually made, property may be temporarily borrowed for the purpose. In these ways, speculation which has the legal traits of legitimate dealing may go on almost as freely as mere wagering, and may have most of the pecuniary and immoral effects of gambling on a large scale.

A real distinction exists between speculation which is carried on by persons of means and experience, and based on an intelligent forecast, and that which is carried on by persons without these qualifications. The former is closely connected with regular business. While not unaccompanied by waste and loss, this speculation accomplishes an amount of good which offsets much of its cost. The latter does but a small amount of good and an almost incalculable amount of evil. In its nature it is in the same class with gambling upon the race-track or at the roulette table, but is practised on a vastly larger scale. Its ramifications extend to all parts of the country. It involves a practical certainty of loss to those who engage in it. A continuous stream of wealth, taken from the actual capital of innumerable persons of relatively small means, swells the income of brokers and operators dependent on this class of business; and insofar as it is consumed like most income, it represents a waste of capital. The total amount of this waste is rudely indicated by the obvious cost of the vast mechanism of brokerage and by manipulators' gains, of both of which it is a large constituent element. But for a continuous influx of new customers, replacing those whose

losses force them out of the "street," this costly mechanism of speculation could not be maintained on anything like its present scale.

THE PROBLEM TO BE SOLVED

The problem, wherever speculation is strongly rooted, is to eliminate that which is wasteful and morally destructive, while retaining and allowing free play to that which is beneficial. The difficulty in the solution of the problem lies in the practical impossibility of distinguishing what is virtually gambling from legitimate speculation. The most fruitful policy will be found in measures which will lessen speculation by persons not qualified to engage in it. In carrying out such a policy exchanges can accomplish more than legislatures. In connection with our reports on the different exchanges, as well as on the field of investment and speculation which lies outside of the exchanges, we shall make recommendations directed to the removal of various evils now existing and to the reduction of the volume of speculation of the gambling type.

THE NEW YORK STOCK EXCHANGE

The New York Stock Exchange is a voluntary association, limited to 1,100 members, of whom about 700 are active, some of them residents of other cities. Memberships are sold for about \$80,000. The Exchange as such does no business, merely providing facilities to members and regulating their conduct. The governing power is in an elected committee of forty members and is plenary in scope. The business transacted on the floor is the purchase and sale of stocks and bonds of corporations and governments. Practically all transactions must be completed by delivery and payment on the following day.

The mechanism of the Exchange, provided by its constitution and rules, is the evolution of more than a century. An organization of stock-brokers existed here in 1792, acquiring more definite form in 1817. It seems certain that for a long period the members were brokers or agents only; at the present time many are principals as well as agents, trading for themselves as well as for their customers. A number of prominent capitalists hold memberships merely for the purpose of availing themselves of the reduced commission charge which the rules authorize between members.

The volume of transactions indicates that the Exchange is to-day probably the most important financial institution in the

world. In the past decade the average annual sales of shares have been 196,500,000 at prices involving an annual average turnover of nearly \$15,500,000,000; bond transactions averaged about \$800,000,000. This enormous business affects the financial and credit interests of the country in so large a measure that its proper regulation is a matter of transcendent importance. While radical changes in the mechanism, which is now so nicely adjusted that the transactions are carried on with the minimum of friction, might prove disastrous to the whole country, nevertheless measures should be adopted to correct existing abuses.

PATRONS OF THE EXCHANGE

The patrons of the Exchange may be divided into the following groups:

(1.) Investors, who personally examine the facts relating to the value of securities or act on the advice of reputable and experienced financiers, and pay in full for what they buy.

(2.) Manipulators, whose connection with corporations issuing or controlling particular securities enables them under certain circumstances to move the prices up or down, and who are thus in some degree protected from dangers encountered by other speculators.

(3.) Floor traders, who keenly study the markets and the general conditions of business, and acquire early information concerning the changes which affect the values of securities. From their familiarity with the technique of dealings on the Exchange, and ability to act in concert with others, and thus manipulate values, they are supposed to have special advantages over other traders.

(4.) Outside operators having capital, experience, and knowledge of the general conditions of business. Testimony is clear as to the result which, in the long run, attends their operations; commissions and interest charges constitute a factor always working against them. Since good luck and bad luck alternate in time, the gains only stimulate these men to larger ventures, and they persist in them till a serious or ruinous loss forces them out of the "Street."

(5.) Inexperienced persons, who act on interested advice, "tips," advertisements in newspapers, or circulars sent by mail, or "take flyers" in absolute ignorance, and with blind confidence in their luck. Almost without exception they eventually lose.

CHARACTER OF TRANSACTIONS

It is unquestionable that only a small part of the transactions upon the Exchange is of an investment character; a substantial part may be characterized as virtually gambling. Yet we are unable to see how the State could distinguish by law between proper and improper transactions, since the forms and the mechanisms used are identical. Rigid statutes directed against the latter would seriously interfere with the former. The experience of Germany with similar legislation is illuminating. But the Exchange, with the plenary power over members and their operations, could provide correctives, as we shall show.

MARGIN TRADING

Purchasing securities on margin is as legitimate a transaction as a purchase of any other property in which part payment is deferred. We therefore see no reason whatsoever for recommending the radical change suggested, that margin trading be prohibited.

Two practices are prolific of losses, namely, buying active securities on small margins and buying unsound securities, paying for them in full. The losses in the former case are due to the quick turns in the market, to which active stocks are subject; these exhaust the margins and call for more money than the purchasers can supply. The losses in the latter case are largely due to misrepresentations of interested parties and unscrupulous manipulations.

To correct the evils of misrepresentation and manipulation, we shall offer in another part of this report certain recommendations. Insofar as losses are due to insufficient margins, they would be materially reduced if the customary percentage of margins were increased. The amount of margin which a broker requires from a speculative buyer of stocks depends, in each case, on the credit of the buyer; and the amount of credit which one person may extend to another is a dangerous subject on which to legislate. Upon the other hand, a rule made by the Exchange could safely deal with the prevalent rate of margins required from customers. In preference, therefore, to recommending legislation, we urge upon all brokers to discourage speculation upon small margins and upon the Exchange to use its influence, and, if necessary, its power, to prevent members from soliciting and generally accepting business on a less margin than 20 per cent.

[Yet William J. Bryan once said to the author that he "insulted his (Mr. Bryan's) intelligence" by asserting that there was no essential difference in buying stocks on credit than in buying real estate on credit.]

PYRAMIDING

"Pyramiding," which is the use of paper profits in stock transactions as a margin for further commitments, should be discouraged. The practice tends to produce more extreme fluctuations and more rapid wiping out of margins. If the stock-brokers and the banks would make it a rule to value securities for the purpose of margin or collateral, not at the current price of the moment, but at the average price of, say, the previous two or three months (provided that such average price were not higher than the price of the moment), the dangers of pyramiding would be largely prevented.

SHORT-SELLING

We have been strongly urged to advise the prohibition or limitation of short sales, not only on the theory that it is wrong to agree to sell what one does not possess, but that such sales reduce the market price of the securities involved. We do not think that it is wrong to agree to sell something that one does not now possess, but expects to obtain later. Contracts and agreements to sell, and deliver in the future, property which one does not possess at the time of the contract, are common in all kinds of business. The man who has "sold short" must some day buy in order to return the stock which he has borrowed to make the short sale. Short-sellers endeavor to select times when prices seem high in order to sell, and times when prices seem low in order to buy, their action in both cases serving to lessen advances and diminish declines of price. In other words, short-selling tends to produce steadiness in prices, which is an advantage to the community. No other means of restraining unwarranted marking up and down of prices has been suggested to us.

The legislation of the State of New York on the subject of short-selling is significant. In 1812 the Legislature passed a law declaring all contracts for the sale of stocks and bonds void, unless the seller at the time was the actual owner or assignee thereof or authorized by such owner or assignee to sell the same.

In 1858 this act was repealed by a statute now in force, which reads as follows:

"An agreement for the purchase, sale, transfer or delivery of a certificate or other evidence of debt, issued by the United States or by any State, or municipal or other corporation, or any share or interest in the stock of any bank, corporation, or joint-stock association, incorporated or organized under the laws of the United States or of any State, is not void, or voidable, because the vendor, at the time of making such contract, is not the owner or possessor of the certificate, or certificates, or other evidence of debt, share or interest."

It has been urged that this statute "specifically legalizes stock gambling." As a matter of fact, however, the law would be precisely the same if that statute were repealed, for it is the well-settled common law of this country, as established by the decisions of the Supreme Court of the United States and of the State courts, that all contracts, other than mere wagering contracts, for the future purchase or sale of securities or commodities are valid, whether the vendor is, or is not, at the time of making such contract, the owner or possessor of the securities or commodities involved, in the absence of a statute making such contracts illegal. So far as any of these transactions are mere wagering transactions, they are illegal, and not enforceable, as the law now stands.

It has been suggested to us that there should be a requirement either by law or by rule of the Stock Exchange, that no one should sell any security without identifying it by number or otherwise. Such a rule would cause great practical difficulties in the case of securities not present in New York at the time when the owner desires to sell them, and would increase the labor and cost of doing business. But, even if this were not the effect, the plan contemplates a restriction upon short sales, which, for the reasons set forth above, seems to us undesirable. It is true that this identification plan exists in England as to sales of bank shares (Leeman act of 1867); but it has proved a dead letter. It has also been used in times of apprehended panic upon the French Bourse, but opinions in regard to its effect there are conflicting. While some contend that it has been useful in preventing panics, others affirm that it has been used simply for the purpose of protecting bankers who were loaded down with certain securities which they were trying to distribute, and who,

through political influence, procured the adoption of the rule for their special benefit.

[If short selling had been prohibited, the panic of 1907, as was shown in a preceding chapter, would have been a disaster ten times more calamitous than it actually was. The only buying then came from speculators who had previously sold short and who now appeared to "cover" at the lower prices. Their buying checked the decline, and thus kept the financial structure from collapsing. There could be no better illustration of the value of speculation in its power to prevent too great price fluctuation.]

MANIPULATION OF PRICES

A subject to which we have devoted much time and thought is that of the manipulation of prices by large interests. This falls into two general classes:

(1.) That which is resorted to for the purpose of making a market for issues of new securities.

(2.) That which is designed to serve merely speculative purposes in the endeavor to make a profit as the result of fluctuations which have been planned in advance.

The first kind of manipulation has certain advantages, and when not accompanied by "matched orders" is unobjectionable *per se*. It is essential to the organization and carrying through of important enterprises, such as large corporations, that the organizers should be able to raise the money necessary to complete them. This can be done only by the sale of securities. Large blocks of securities, such as are frequently issued by railroad and other companies, cannot be sold over the counter or directly to the ultimate investor, whose confidence in them can, as a rule, be only gradually established. They must therefore, if sold at all, be disposed of to some syndicate, who will in turn pass them on to middlemen or speculators, until, in the course of time, they find their way into the boxes of investors. But prudent investors are not likely to be induced to buy securities which are not regularly quoted on some exchange, and which they cannot sell, or on which they cannot borrow money at their pleasure. If the securities are really good and bids and offers *bona-fide*,

open to all sellers and buyers, the operation is harmless. It is merely a method of bringing new investments into public notice.

The second kind of manipulation mentioned is undoubtedly open to serious criticism. It has for its object either the creation of high prices for particular stocks, in order to draw in the public as buyers and to unload upon them the holdings of the operators, or to depress the prices and induce the public to sell. There have been instances of gross and unjustifiable manipulation of securities, as in the case of American Ice stock. While we have been unable to discover any complete remedy short of abolishing the Stock Exchange itself, we are convinced that the Exchange can prevent the worst forms of this evil by exercising its influence and authority over the members to prevent them. When continued manipulation exists it is patent to experienced observers.

[The degree to which manipulation is resorted to in the stock-market is a matter of some dispute. The author holds that it has often been practised in the past, having been at many times a vital factor in determining prices. So good an authority as Thomas F. Woodlock, however, claims that "it is at this time an auxiliary factor to a small extent." The distinction which the Hughes Commission draws between two classes of manipulation is entirely just. There is a kind of manipulation which is practically market leadership, which consists in the marshaling of all legitimate influences in such a way as to cause the market to express in its quotations a change in economic conditions which has not yet made its impress on the state of trade or the volume of traffic. This kind of manipulation is as proper as the organization of public opinion in political campaigns. The other and grosser forms of manipulation are of course of a criminal nature. They are a method of extracting money from other people by methods of deceit.]

"WASH SALES" AND "MATCHED ORDERS"

In the foregoing discussion we have confined ourselves to *bona-fide* sales. So far as manipulation of either class is based upon

fictitious or so-called "wash sales," it is open to the severest condemnation, and should be prevented by all possible means. These fictitious sales are forbidden by the rules of all the regular exchanges, and are not enforceable at law. They are less frequent than many persons suppose. A transaction must take place upon the floor of the Exchange to be reported, and if not reported does not serve the purpose of those who engage in it. If it takes place on the floor of the Exchange, but is purely a pretence, the brokers involved run the risk of detection and expulsion, which is to them a sentence of financial death. There is, however, another class of transactions called "matched orders," which differ materially from those already mentioned, in that they are actual and enforceable contracts. We refer to that class of transactions, engineered by some manipulator, who sends a number of orders simultaneously to different brokers, some to buy and some to sell. These brokers, without knowing that other brokers have countervailing orders from the same principal, execute their orders upon the floor of the Exchange, and the transactions become binding contracts; they cause an appearance of activity in a certain security which is unreal. Since they are legal and binding, we find a difficulty in suggesting a legislative remedy. But where the activities of two or more brokers in certain securities become so extreme as to indicate manipulation rather than genuine transactions, the officers of the Exchange would be remiss unless they exercised their influence and authority upon such members in a way to cause them to desist from such suspicious and undesirable activity. As already stated, instances of continuous manipulation of particular securities are patent to every experienced observer, and could without difficulty be discouraged, if not prevented, by prompt action on the part of the Exchange authorities.

CORNERS

The subject of corners in the Stock-Market has engaged our attention. The Stock Exchange might properly adopt a rule providing that the governors shall have power to decide when a corner exists and to fix a settlement price, so as to relieve innocent persons from the injury or ruin which may result therefrom. The mere existence of such a rule would tend to prevent corners.

[With the creation of big corporations having enormous issues of stocks and with the wide distribution of

the ownership of these stocks the opportunity of cornering has been reduced to a minimum and corners are no longer as frequent on the Stock Exchange as in former years. The last great corner was that in the Northern Pacific stock in 1901 and was not the result of any manipulative design to corner the stock, but was brought about by a contest for control.]

FAILURES AND EXAMINATION OF BOOKS

We have taken testimony on the subject of recent failures of brokers, where it has been discovered that they were insolvent for a long period prior to their public declaration of failure, and where their activities after their insolvency not only caused great loss to their customers, but also, owing to their efforts to save themselves from bankruptcy, worked great injury to innocent outsiders. For cases of this character, there should be a law analogous to that forbidding banks to accept deposits after insolvency is known; and we recommend that a statute making it a misdemeanor for a broker to receive any securities or cash from any customer (except in liquidating or fortifying an existing account), or to make any further purchases or sales for his own account, after he has become insolvent; with the provision that a broker shall be deemed insolvent when he has on his books an account or accounts which, if liquidated, would exhaust his assets, unless he can show that he had reasonable ground to believe that such accounts were good.

The advisability of requiring by State authority an examination of the books of all members of the Exchange, analogous to that required of banks, has been urged upon us. Doubtless some failures would be prevented by such a system rigidly enforced, although bank failures do occur in spite of the scrutiny of the examiners. Yet the relations between brokers and their customers are of so confidential a nature that we do not recommend an examination of their books by any public authority. The books and accounts of the members of the Exchange should, however, be subjected to periodic examination and inspection pursuant to rules and regulations to be prescribed by the Exchange, and the result should be promptly reported to the governors thereof.

It is vain to say that a body possessing the powers of the

board of governors of the Exchange, familiar with every detail of the mechanism, generally acquainted with the characteristics of members, cannot improve present conditions. It is a deplorable fact that with all their power and ability to be informed, it is generally only after a member or a firm is overtaken by disaster, involving scores or hundreds of innocent persons, and causing serious disturbances, that the Exchange authorities take action. No complaint can be registered against the severity of the punishment then meted out; but in most cases the wrongdoing thus atoned for, which has been going on for a considerable period, might have been discovered under a proper system of supervision, and the vastly preponderant value of prevention over cure demonstrated.

[Members of the Stock Exchange hold that a rule providing for general inspection of accounts and books of members would partake of the nature of an inquisition, and would be bitterly opposed. They hold also that such a rule would not produce the desired results. The Exchange, however, has a committee empowered to examine into the dealings of any member. On April 21, 1910, the Governing Committee of the Exchange adopted the following amendment to the Constitution: "A Law Committee to consist of five members, to which shall be referred all questions of law affecting the interests of the Exchange. It shall act in an advisory capacity to the President, when requested, represent the Exchange in conferences with other interests, and is authorized and empowered, whenever the Committee shall deem it to be for the interest of the Exchange, to examine into the dealings of any member of the Exchange."]

REHYPOTHECATION OF SECURITIES

We have also considered the subject of rehypothecating, loaning, and other use of securities by brokers who hold them for customers. So far as any broker applies to his own use any securities belonging to a customer, or hypothecates them for a greater amount than the unpaid balance of the purchase price, without the customer's consent, he is undoubtedly guilty of a

conversion under the law as it exists to-day, and we call this fact to the attention of brokers and the public. When a broker sells the securities purchased for a customer who has paid therefor in whole or in part, except upon the customer's default, or disposes of them for his own benefit, he should be held guilty of larceny, and we recommend a statute to that effect.

DEALING FOR CLERKS

The Exchange now has a rule forbidding any member to deal or carry an account for a clerk or employé of any other member. This rule should be extended so as to prevent dealing for account of any clerk or subordinate employé of any bank, trust company, insurance company, or other moneyed corporation or banker.

[The recommendation of the Hughes Commission was adopted by the Stock Exchange on April 4, 1910. The resolution is as follows: "Resolved, That the taking or carrying of a speculative account, or the making of a speculative transaction, in which a clerk of the Exchange, or of a member of the Exchange, or of a bank, trust company, banker or insurance company, is directly or indirectly interested, unless the written consent of the employer has been first obtained, shall be deemed an act detrimental to the interest and welfare of the Exchange."]

LISTING REQUIREMENTS

Before securities can be bought and sold on the Exchange, they must be examined. The committee on Stock List is one of the most important parts of the organization, since public confidence depends upon the honesty, impartiality, and thoroughness of its work. While the Exchange does not guarantee the character of any securities, or affirm that the statements filed by the promoters are true, it certifies that due diligence and caution have been used by experienced men in examining them. Admission to the list, therefore, establishes a presumption in favor of the soundness of the security so admitted. Any securities authorized to be bought and sold on the Exchange, which have not been subjected to such scrutiny, are said to be in the unlisted

department, and traders who deal in them do so at their own risk. We have given consideration to the subject of verifying the statements of fact contained in the papers filed with the applications for listing, but we do not recommend that either the State or the Exchange take such responsibility. Any attempt to do so would undoubtedly give the securities a standing in the eyes of the public which would not in all cases be justified. In our judgment, the Exchange should, however, adopt methods to compel the filing of frequent statements of the financial condition of the companies whose securities are listed, including balance sheets, income and expense accounts, etc., and should notify the public that these are open to examination under proper rules and regulations. The Exchange should also require that there be filed with future applications for listing a statement of what the capital stock of the company has been issued for, showing how much has been issued for cash, how much for property, with a description of the property, etc., and also showing what commission, if any, has been paid to the promoters or vendors. Furthermore, means should be adopted for holding those making the statements responsible for the truth thereof. The unlisted department, except for temporary issues, should be abolished.

[The unlisted department was, in accordance with the recommendation of the Hughes Commission, abolished on April 21, 1910.]

FICTITIOUS TRADES

Complaint is made that orders given by customers are sometimes not actually executed, although so reported by the broker. We recommend the passage of a statute providing that, in case it is pleaded in any suit by or against a broker that the purchase or sale was fictitious, or was not an actual *bona-fide* purchase or sale by the broker as agent for the customer, the court or jury shall make a special finding upon that fact. In case it is found that the purchase or sale was not actual and *bona-fide* the customer shall recover three times the amount of the loss which he sustained thereby; and copies of the finding shall be sent to the district attorney of the county and to the Exchange, if the broker be a member.

UNIT OF TRADING

The Exchange should insist that all trading be done on the

basis of a reasonably small unit (say 100 shares of stock or \$1,000 of bonds), and should not permit the offers of such lots, or bids for such lots, to be ignored by traders offering or bidding for larger amounts. The practice now permitted of allowing bids and offers for large amounts, all or none, assists the manipulation of prices. Thus a customer may send an order to sell 100 shares of a particular stock at par, and a broker may offer to buy 1,000 shares, all or none, at 101, and yet no transaction take place. The bidder in such a case should be required to take all the shares offered at the lower price before bidding for a larger lot at a higher price. This would tend to prevent matched orders.

[This recommendation was adopted by the Exchange on March 30, 1910. The new rules are:

“Quotations

“1. That the recognized quotation on stocks shall be public bids and offers on lots of 100 shares.

“Any Part

“2. All bids and offers on larger lots shall be considered to be for any part thereof in lots of 100 shares or of multiples thereof, whether so stated in the bid or offer or not.

“Bid Above Offering Price

“3. If a bid is made for a larger lot of stock above the price at which smaller lots are offered, or if a transaction is made in a larger lot above the price at which smaller lots are offered, such bidder or buyer shall be compelled to buy any or all of the smaller lots which were publicly offered at the time, at the lower price, up to the amount of the bid for the larger lot. If the bid for the larger lot is accepted, and the buyer is unwilling to buy more, the seller must give up to the members who were publicly offering to sell at the lower price, such amounts as

they were publicly offering to sell at the lower price, if such claim is made immediately.

“Offer Below Bidding Price

“4. If an offer is made to sell a larger lot of stock below the price which is bid for smaller lots, or if a transaction is made in a larger lot below the price which is bid for smaller lots, such member offering to sell, or the seller, shall be compelled to sell any or all of the smaller lots which were publicly bid for at the time, at the higher price, up to the amount of the offer of the larger lot. If the offer of the larger lot is accepted, and the seller is unwilling to sell more, the buyer must give up to the members who were publicly bidding the higher price, such amounts as they were publicly bidding for, at the higher price, if such claim is made immediately.

“Claims for Sales at the Offering Price, or at Bidding Price

“5. A member may sell on offer the largest amount bid for without regard to priority of bids. Should the offer be of an amount larger than the largest bid, the balance shall go to the next largest bidder in sequence; bids for equal amounts being on a par.

“A member may buy on bids under the same rule.

“Silent Bids and Offers Not Recognized

“6. Attention is directed to the resolution of the Governing Committee adopted October 26, 1892, which reads as follows:

“ ‘When a purchase or sale is claimed by a party who states that he had on the floor a prior or better bid or offer such claim shall not be sustained if the bid or offer was not made with the publicity and frequency necessary

to make the existence of such bid or offer generally known at the time of the transaction.'

"Disputes

"7. Disputes arising from a question as to priority of bid or offer, if not settled by agreement between the members interested, shall be settled by vote of the members knowing of the transaction in question.

"Disputes as to the application of the rules relating to the transaction in question, if not settled by agreement between the members interested, shall be settled by any member of the Committee of Arrangements.

"Active Openings

"8. The above rules shall not apply to lots of less than 100 shares, nor to active openings when bids and offers are simultaneous."]

STOCK CLEARING-HOUSE

We have also considered the subject of the Stock Exchange Clearing-House. While it is undoubtedly true that the clearing of stocks facilitates transactions which may be deemed purely manipulative, or virtually gambling transactions, nevertheless we are of the opinion that the Exchange could not do its necessary and legitimate business but for the existence of the clearing system, and, therefore, that it is not wise to abolish it.

The transactions in stocks which are cleared are transcribed each day on what are called "clearing sheets," and these sheets are passed into the Clearing-House and there filed for one week only. In view of the value of these sheets as proving the transactions and the prices, they should be preserved by the Exchange for at least six years, and should be at the disposal of the courts, in case of any dispute.

SPECIALISTS

We have received complaints that specialists on the floor of the Exchange, dealing in inactive securities, sometimes buy or sell for their own account while acting as brokers. Such acts

without the principal's consent are illegal. In every such case recourse may be had to the courts.

Notwithstanding that the system of dealing in specialties is subject to abuses, we are not convinced that the English method of distinguishing between brokers and jobbers serves any better purpose than our own practice, while its introduction here would complicate business. It should also be noted that the practice of specialists in buying and selling for their own account often serves to create a market where otherwise one would not exist.

[The Exchange in accordance with this recommendation adopted the following rule on April 4, 1910: "Resolved, That any member of the Exchange who, while acting as a broker, either as a 'Specialist' or otherwise, shall buy or sell directly or indirectly for his own account, for account of a partner, or for any account in which he has an interest, the securities, the order for the purchase or sale of which has been accepted by him for execution, shall be deemed guilty of conduct or proceeding inconsistent with just and equitable principles of trade, and shall be subject to the penalties provided in Article XVII, Section 6, of the Constitution.

"The foregoing rule shall not apply to the act of a member who, by reason of his neglect to execute an order, is compelled to take or to supply on his own account the securities named in the order; in such case the member is not acting as a broker and shall not charge a commission.

"A member, acting as a broker, is permitted to report to his principal a transaction as made with himself, only when he has orders both to buy and to sell, and not to give up, and then he must add to his name on the report, 'on order', or words to that effect."]

BRANCH OFFICES

Complaint has been made of branch offices in the city of New York, often luxuriously furnished and sometimes equipped with lunch rooms, cards, and liquor. The tendency of many of them

is to increase the lure of the ticker by the temptation of creature comforts, appealing thus to many who would not otherwise speculate. The governors of the Exchange inform us that they realize that some of these offices have brought discredit on the Exchange, and that on certain occasions they have used their powers to suppress objectionable features. It seems to us that legitimate investors and speculators might, without much hardship, be compelled to do business at the main offices, and that a hard-and-fast rule against all branch offices in the city of New York might well be adopted by the Exchange. In any event, we are convinced that a serious and effective regulation of these branch offices is desirable.

[The rules of the Exchange covering this matter provide that every member must register with the secretary an address, and if he forms a partnership he shall register the same; that no person shall be eligible to partnership in more than one registered firm at the same time; that no member shall form a partnership with a suspended or expelled member; that members may, by the consent and approval of the Committee on Commissions, establish branch offices, which must be either in charge of a partner or a manager or clerk acceptable to the Governing Committee, and that these branch offices shall be registered; that the managing clerk and other employés must be paid fixed salaries, not varying with the business, and that no agents for the solicitation of business shall be employed on other than these terms; that when it shall appear that a member has formed a partnership or established a branch office, whereby the interest or good repute of the Exchange may suffer, the Governing Committee may require the dissolution of such partnership, or the discontinuance of such branch office.]

INCORPORATION OF EXCHANGE

We have been strongly urged to recommend that the Exchange be incorporated, in order to bring it more completely under the

authority and supervision of the State and the process of the courts. Under existing conditions, being a voluntary organization, it has almost unlimited power over the conduct of its members, and it can subject them to instant discipline for wrongdoing, which it could not exercise in a summary manner if it were an incorporated body. We think that such power residing in a properly chosen committee is distinctly advantageous. The submission of such questions to the courts would involve delays and technical obstacles which would impair discipline without securing any greater measure of substantial justice. While this committee is not entirely in accord on this point, no member is yet prepared to advocate the incorporation of the Exchange and a majority of us advise against it, upon the ground that the advantages to be gained by incorporation may be accomplished by rules of the Exchange and by statutes aimed directly at the evils which need correction.

The Stock Exchange in the past, although frequently punishing infractions of its rules with great severity, has, in our opinion, at times failed to take proper measures to prevent wrongdoing. This has been probably due not only to a conservative unwillingness to interfere in the business of others, but also to a spirit of comradeship which is very marked among brokers, and frequently leads them to overlook misconduct on the part of fellow-members, although at the same time it is a matter of cynical gossip and comment in the street. The public has a right to expect something more than this from the Exchange and its members. This committee, in refraining from advising the incorporation of the Exchange, does so in the expectation that the Exchange will in the future take full advantage of the powers conferred upon it by its voluntary organization, and will be active in preventing wrongdoing such as has occurred in the past. Then we believe that there will be no serious criticism of the fact that it is not incorporated. If, however, wrongdoing recurs, and it should appear to the public at large that the Exchange has been derelict in exerting its powers and authority to prevent it, we believe that the public will insist upon the incorporation of the Exchange and its subjection to State authority and supervision.

[The action of a majority of the Hughes Commission in refusing to advocate the incorporation of the Stock

Exchange is in contrast to the action of the Royal Commission of 1877, a majority of which recommended that the London Exchange should voluntarily apply for a Royal Charter, or Act of Incorporation. The action of the Royal Commission, however, was based upon criticism of a method of business of the London Exchange, such as could not exist under the regulations of the New York Exchange. It appears that the chief reason for the recommendation of the Royal Commission was that the membership of the London Exchange and its Supervising Committee was continually changing, being reëlected every year and the committee in charge being subject to frequent rotation in office. The New York Stock Exchange system is entirely different, as the membership is like that of a club. As long as a member desires to remain a member, as long as he keeps in good standing and pays his dues, he continues in the membership without the necessity of annual reëlection. Moreover, the forty members of the Governing Committee of the New York Exchange are divided into four classes, each elected annually, so that every member of the committee holds office for four years, and the Exchange has a habit of reëlecting, term after term, many of the Governors. As long as the Exchange performs well its public duty of regulating the stock-market, it is far better that it should be left unmolested by governmental interference.]

WALL STREET AS A FACTOR

There is a tendency on the part of the public to consider Wall Street and the New York Stock Exchange as one and the same thing. This is an error arising from their location. We have taken pains to ascertain what proportion of the business transacted on the Exchange is furnished by New York city. The only reliable sources of information are the books of the commission houses. An investigation was made of the transactions on the Exchange for a given day, when the sales were 1,500,000

shares. The returns showed that on that day 52 per cent. of the total transactions on the Exchange apparently originated in New York city, and 48 per cent. in other localities.

THE CONSOLIDATED STOCK EXCHANGE

The Consolidated Exchange was organized as a mining stock exchange in 1875, altering its name and business in 1886. Although of far less importance than the Stock Exchange, it is nevertheless a *secondary market* of no mean proportions; by far the greater part of the trading is in securities listed upon the main exchange, and the prices are based upon the quotations made there. The sales average about 45,000,000 shares per annum. The fact that its members make a specialty of "broken lots," i. e., transactions in shares less than the 100 unit, is used as a ground for the claim that it is a serviceable institution for investors of relatively small means. But it is obvious that its utility as a provider of capital for enterprises is exceedingly limited; and that it affords facilities for the most injurious form of speculation—that which attracts persons of small means.

It also permits dealing in shares not listed in the main exchange, and in certain mining shares, generally excluded from the other. In these cases it prescribes a form of listing requirements, but the original listing of securities is very rarely availed of. The rules also provide for dealing in grain, petroleum, and other products. Wheat is, however, at present the only commodity actively dealt in, and this is due solely to the permission to trade in smaller lots than the Produce Exchange unit of 5,000 bushels.

There are 1,225 members, about 450 active, and memberships have sold in recent years at from \$650 to \$2,000. In general the methods of conducting business are similar to those of the larger exchange, and subject to the same abuses.

Very strained relations have existed between the two security exchanges since the lesser one undertook in 1886 to deal in stocks. The tension has been increased by the methods by which the Consolidated obtains the quotations of the other, through the use of the "tickers" conveying them. It is probable that without the use of these instruments the business of the Consolidated Exchange would be paralyzed; yet the right to use them rests solely upon a technical point in a judicial decision which enjoins their removal.

[The rules adopted May 19, 1909, by the New York Stock Exchange in relation to the Consolidated Stock Exchange are as follows: "Resolved, That any connection, direct or indirect, by means of public or private telephone, telegraph wire or any electrical or other contrivance or device or pneumatic tube or other apparatus or device whatsoever, or any communication by means of messenger, or clerks, or in any other manner, directly or indirectly, between the New York Stock Exchange Building, or any part thereof, or any office of any member of said New York Stock Exchange, or any part thereof, or any room, place, hallway or space occupied or controlled by said Consolidated Stock Exchange, or any office of any member of said Consolidated Stock Exchange, who is engaged in business upon said Consolidated Stock Exchange, or any transmission, direct or indirect, of information from said New York Stock Exchange Building, or from the office of any member of said New York Stock Exchange, to the said Consolidated Stock Exchange, or to the office of any member of the said Consolidated Stock Exchange who is engaged in business upon said Consolidated Stock Exchange, through any means, apparatus, device or contrivance as above mentioned, is detrimental to the interest and welfare of this Exchange, and is hereby prohibited.

"Resolved, That any member of this Exchange who transacts any business, directly or indirectly, with or for any member of said Consolidated Stock Exchange who is engaged in business upon said Consolidated Stock Exchange, shall, on conviction thereof, be deemed to have committed an act or acts detrimental to the interest and welfare of this Exchange."']

HOLDING COMPANIES

Connected with operations on the Stock Exchange are a class

of manipulations originating elsewhere. The values of railway securities, for example, depend upon the management of the companies issuing them, the directors of which may use their power to increase, diminish, or even extinguish them, while they make gains for themselves by operations on the Exchange. They may advance the price of a stock by an unexpected dividend, or depress it by passing an expected one. They may water a stock by issuing new shares, with no proportionate addition to the productive assets of the company, or load it with indebtedness, putting an unexpected lien on the shareholders' property. Such transactions affect not only the fortunes of the shareholders, who are designedly kept in ignorance of what is transpiring, but also the value of investments in other similar companies the securities of which are affected sympathetically. Railroad wrecking was more common in the last half-century than it is now, but we have some glaring examples of it in the débris of our street railways to-day.

The existence and misuse of such powers on the part of directors are a menace to corporate property and a temptation to officials who are inclined to speculate, leading them to manage the property so as to fill their own pockets by indirect and secret methods.

A holding company represents the greatest concentration of power in a body of directors and the extreme of helplessness on the part of shareholders. A corporation may be so organized that its bonds and preferred stock represent the greater part of its capital, while the common stock represents the actual control. Then, if a second company acquires a majority of the common stock, or a majority of the shares that are likely to be voted at elections, it may control the former company, and as many other companies as it can secure. The shareholders of the subsidiary companies may be thus practically deprived of power to protect themselves against injurious measures and even to obtain information of what the holding company is doing, or intends to do, with their property.

As a first step toward mitigating this evil we suggest that the shareholders of subsidiary companies, which are dominated by holding companies, or voting trusts, shall have the same right to examine the books, records, and accounts of such holding companies, or voting trusts, that they have in respect of the companies whose shares they hold, and that the shareholders of holding companies have the same right as regards the books, records,

and accounts of the subsidiary companies. The accounts of companies not merged should be separately kept and separately stated to their individual stockholders, however few they may be.

We may point out the fact that the powers which holding companies now exercise were never contemplated, or imagined, when joint stock corporations were first legalized. If Parliament and Legislatures had foreseen their growth they would have erected barriers against it.

RECEIVERSHIPS

Our attention has been directed to the well-known abuses frequently accompanying receiverships of large corporations, and more especially public service corporations, and the issue of receivers' certificates. We feel that the numerous cases of long-drawn-out receiverships, in some instances lasting more than ten years, and of the issue of large amounts of receivers' certificates, which take precedence over even first mortgage bonds, are deserving of most serious consideration.

Legislation providing for a short-time limitation on receiverships, or for a limitation of receivers' certificates to a small percentage of the mortgage liens on the property, could be rendered unnecessary, however, by the action of the courts themselves along these lines, so as to make impossible in the future the abuses which have been so common in the past.

EFFECT OF THE MONEY-MARKET ON SPECULATION

It has been urged that your committee consider the influence of the money-market upon security speculation.

As a result of conditions to which the defects of our monetary and banking systems chiefly contribute, there is frequently a congestion of funds in New York city, when the supply is in excess of business needs and the accumulated surplus from the entire country generally is thereby set free for use in the speculative market. Thus there almost annually occurs an inordinately low rate for "call loans," at times less than one per cent. During the prevalence of this abnormally low rate speculation is unduly incited, and speculative loans are very largely expanded.

On the other hand, occasional extraordinary industrial activity, coupled with the annually recurring demands for money during the crop-moving season, causes money stringency, and the calling of loans made to the stock-market; an abnormally high

interest rate results, attended by violent reaction in speculation and abrupt fall in prices. The pressure to retain funds in the speculative field at these excessively high interest rates tends to a curtailment of reasonable accommodation to commercial and manufacturing interests, frequently causing embarrassment and at times menacing a crisis.

The economic questions involved in these conditions are the subject of present consideration by the Federal authorities and the National Monetary Commission. They could not be adjusted or adequately controlled either through Exchange regulation or State legislation.

THE USURY LAW

The usury law of this State prohibits the taking of more than 6 per cent. interest for the loan of money, but by an amendment adopted in 1882 an exception is made in the case of loans of \$5,000 or more, payable on demand and secured by collateral. It is claimed by some that, since this exception enables stock speculators, in times of great stringency, to borrow money by paying excessively high rates of interest, to the exclusion of other borrowers, a repeal of this provision would check inordinate speculation. We direct attention, however, to the fact that the statute in question excepts such loans as are secured by warehouse receipts, bills of lading, bills of exchange, and other negotiable instruments. Hence its operation is not limited to Stock Exchange transactions, or to speculative loans in general. Moreover the repeal of the statute would affect only the conditions when high rates of interest are exacted, and not those of abnormally low rates, which really promote excessive speculation. Finally, our examination indicates that prior to the enactment of the statute of 1882 such loans were negotiated at the maximum (6 per cent.), plus a commission, which made it equivalent to the higher rate; and a repeal of the statute would lead to the resumption of this practice. Therefore, as the repeal would not be beneficial, we cannot recommend any legislation bearing upon the interest laws of the State, unless it be the repeal of the usury law altogether, as we believe that money will inevitably seek the point of highest return for its use. In nine States of the Union there are at present no usury laws.

[The report of the Commission on this subject is in

accordance with the best financial authorities. It has often been proposed that it would be to the advantage of both the money- and stock-markets, as well as of the mercantile community at large, if some method were adopted by which more staple rates of interest could be insured. The extreme changes in rates of interest which sometimes occur in Wall Street are demoralizing and discreditable. The establishment of a great central reserve association, such as is proposed by the Monetary Commission, would undoubtedly do away with this evil. It has also been frequently proposed that the New York Clearing-House establish a committee empowered to fix an equitable rate of interest every day. This would probably work well, though it might result in annoying criticism of the Clearing-House as being a "money trust."]

THE CURB MARKET

There is an unorganized stock-market held in the open air during exchange hours. It occupies a section of Broad Street. An enclosure in the center of the roadway is made by means of a rope, within which the traders are supposed to confine themselves, leaving space on either side for the passage of street traffic; but during days of active trading the crowd often extends from curb to curb.

There are about 200 subscribers, of whom probably 150 appear on the curb each day, and the machinery of the operations requires the presence of as many messenger boys and clerks. Such obstruction of the public thoroughfare is obviously illegal, but no attempt has been made by the city authorities to disperse the crowd that habitually assembles there.

This open-air market, we understand, is dependent for the great bulk of its business upon members of the Stock Exchange, approximately 85 per cent. of the orders executed on the curb coming from Stock Exchange houses. The Exchange itself keeps the curb market in the street, since it forbids its own members engaging in any transaction in any other security exchange in New York. If the curb were put under a roof and organized, this trading could not be maintained.

ITS UTILITY

The curb market has existed for upwards of thirty years, but only since the great development of trading in securities began, about the year 1897, has it become really important. It affords a public market place where all persons can buy and sell securities which are not listed on any organized exchange. Such rules and regulations as exist are agreed to by common consent, and the expenses of maintenance are paid by voluntary subscription. An agency has been established by common consent through which the rules and regulations are prescribed.

This agency consists solely of an individual who, through his long association with the curb, is tacitly accepted as arbiter. From this source we learn that sales recorded during the year 1908 were roughly as follows:

Bonds	\$66,000,000
Stocks, industrials, shares.....	4,770,000
Stocks, mining, shares.....	41,825,000

Official quotations are issued daily by the agency and appear in the public press. Corporations desiring their securities to be thus quoted are required to afford the agency certain information, which is, however, superficial and incomplete. There is nothing on the curb which corresponds to the listing process of the Stock Exchange. The latter, while not guaranteeing the soundness of the securities, gives a *prima facie* character to those on the list, since the stock list committee takes some pains to learn the truth. The decisions of the agent of the curb are based on insufficient data, and since much of the work relates to mining schemes in distant States and Territories, and foreign countries, the mere fact that a security is quoted on the curb should create no presumption in its favor; quotations frequently represent "wash sales," thus facilitating swindling enterprises.

EVILS OF UNORGANIZED STATUS

Bitter complaints have reached us of frauds perpetrated upon confiding persons, who have been induced to purchase mining shares because they are quoted on the curb; these are frequently advertised in newspapers and circulars sent through the mails as so quoted. Some of these swindles have been traced to their fountain-heads by the Post Office Department, to which com-

plaint has been made; but usually the swindler, when cornered, has settled privately with the individual complainant, and then the prosecution has failed for want of testimony. Meanwhile the same operations may continue in many other places, till the swindle becomes too notorious to be profitable.

Notwithstanding the lack of proper supervision and control over the admission of securities to the privilege of quotation, some of them are meritorious, and in this particular the curb performs a useful function. The existence of the cited abuses does not, in our judgment, demand the abolition of the curb market. Regulation is, however, imperative. To require an elaborate organization similar to that existing in the Exchanges would result in the formation of another curb free from such restraint.

As has been stated, about 85 per cent. of the business of the curb comes through the offices of members of the New York Stock Exchange, but a provision of the constitution of that Exchange prohibits its members from becoming members of, or dealing on, any other *organized* Stock Exchange in New York. Accordingly, operators on the curb market have not attempted to form an organization. The attitude of the Stock Exchange is therefore largely responsible for the existence of such abuses as result from the want of organization of the curb market. The brokers dealing on the latter do not wish to lose their best customers, and hence they submit to these irregularities and inconveniences.

Some of the members of the Exchange dealing on the curb have apparently been satisfied with the prevailing conditions, and in their own selfish interests have maintained an attitude of indifference toward abuses. We are informed that some of the most flagrant cases of discreditable enterprises finding dealings on the curb were promoted by members of the New York Stock Exchange.

REFORMATION OF THE CURB

The present apparent attitude of the Exchange toward the curb seems to us clearly inconsistent with its moral obligations to the community at large. Its governors have frequently avowed before this committee a purpose to coöperate to the greatest extent for the remedy of any evils found to exist in stock speculation. The curb market as at present constituted affords ample opportunity for the exercise of such helpfulness.

The Stock Exchange should compel the formulation and enforcement of such rules as may seem proper for the regulation of business on the curb, the conduct of those dealing thereon, and, particularly, for the admission of securities to quotation.

If the curb brokers were notified that failure to comply with such requirements would be followed by an application of the rule of non-intercourse, there is little doubt that the orders of the Exchange would be obeyed. The existing connection of the Exchange gives it ample power to accomplish this, and we do not suggest anything implying a more intimate connection.

Under such regulation, the curb market might be decently housed to the relief of its members and the general public.

THE ABUSE OF ADVERTISING

A large part of the discredit in the public mind attaching to "Wall Street" is due to frauds perpetrated on the small investor throughout the country in the sale of worthless securities by means of alluring circulars and advertisements in the newspapers. To the success of such swindling enterprises a portion of the press contributes.

Papers which honestly try to distinguish between swindling advertisements and others, may not in every instance succeed in doing so; but readiness to accept advertisements which are obviously traps for the unwary is evidence of a moral delinquency which should draw out the severest public condemnation.

So far as the press in large cities is concerned the correction of the evil lies, in some measure, in the hands of the reputable bankers and brokers, who, by refusing their advertising patronage to newspapers notoriously guilty in this respect, could compel them to mend their ways, and at the same time prevent fraudulent schemes from deriving an appearance of merit by association with reputable names.

Another serious evil is committed by men who give standing to promotions by serving as directors without full knowledge of the affairs of the companies, and by allowing their names to appear in prospectuses without knowing the accuracy and good faith of the statements contained therein. Investors naturally and properly pay great regard to the element of personal character, both in the offering of securities and in the management of corporations, and can therefore be deceived by the names used in unsound promotions.

BRITISH SYSTEM CONSIDERED

We have given much attention to proposals for compelling registration, by a bureau of the State government, of all corporations whose securities are offered for public sale in this State, accompanied by information regarding their financial responsibility and prospects, and prohibiting the public advertisement or sale of such securities without a certificate from the bureau that the issuing company has been so registered. The object of such registration would be to identify the promoters, so that they might be readily prosecuted in case of fraud. Such a system exists in Great Britain. The British "Companies Act" provides for such registration, and the "Directors' Liability Act" regulates the other evil referred to above. Some members of your committee are of the opinion that these laws should be adopted in this country, so far as they will fit conditions here.

This would meet with some difficulties, due in part to our multiple system of State government. If the law were in force only in this State, the advertisement and sale of the securities in question would be unhindered in other markets, and companies would be incorporated in other States, in order that their directors and promoters should escape liability. The certificate of registration might be accepted by inexperienced persons as an approval by State authority of the enterprise in question. For these reasons the majority of your committee does not recommend the regulation of such advertising and sale by State registration.

Insofar as the misuse of the post office for the distribution of swindling circulars could be regulated by the Federal authorities, the officials have been active in checking it. They inform us that vendors of worthless securities are aided materially by the opportunity to obtain fictitious price quotations for them on the New York curb market.

LEGISLATION RECOMMENDED

For the regulation of the advertising evils, including the vicious "tipster's" cards, we recommend an amendment to the Penal Code to provide that any person who advertises, in the public press or otherwise, or publishes, distributes or mails, any prospectus, circular, or other statement in regard to the value of any stock, bonds, or other securities, or in regard to the business affairs, property, or financial condition of any corporation, joint

stock association, copartnership or individual issuing stock, bonds or other similar securities, which contains any statement of fact which is known to such person to be false, or as to which such person has no reasonable grounds for believing it to be true, or any promises or predictions which he cannot reasonably justify, shall be guilty of a misdemeanor; and, further, that every newspaper or other publication printing or publishing such an advertisement, prospectus, circular, or other statement, shall before printing or publishing the same, obtain from the person responsible for the same, and retain, a written and signed statement to the effect that such person accepts responsibility for the same, and for the statements of fact contained therein, which statement shall give the address, with street number, of such person; and that the publisher of any such newspaper or other publication which shall fail to obtain and retain such statement shall be guilty of a misdemeanor.

BUCKET-SHOPS

Bucket-shops are ostensibly brokerage offices, where, however, commodities and securities are neither bought nor sold in pursuance of customers' orders, the transactions being closed by the payment of gains or losses, as determined by price quotations. In other words, they are merely places for the registration of bets or wagers; their machinery is generally controlled by the keepers, who can delay or manipulate the quotations at will.

The law of this State, which took effect September 1, 1908, makes the keeping of a bucket-shop a felony, punishable by fine and imprisonment, and in the case of corporations, on second offenses by dissolution or expulsion from the State. In the case of individuals the penalty for a second offense is the same as for the first. These penalties are imposed upon the theory that the practice is gambling; but in order to establish the fact of gambling it is necessary, under the New York law, to show that *both* parties to the trade intended that it should be settled by the payment of differences, and not by delivery of property. Under the law of Massachusetts it is necessary to show only that the bucket-shop keeper so intended. The Massachusetts law provides heavier penalties for the second offense than for the first, and makes it a second offense if a bucket-shop is kept open after the first conviction.

[The action taken by the New York Stock Exchange

May 19, 1909, in relation to bucket-shops provides: "That any member of this Exchange who is interested in, or associated in business with, or whose office is connected, directly or indirectly, by public or private wire or other method of contrivance with, or who transacts any business directly or indirectly, with or for, any organization, firm or individual engaged in the business of dealing in differences or quotations (commonly called a bucket-shop) shall, on conviction thereof, be deemed to have committed an act or acts detrimental to the interest and welfare of this Exchange."']

AMENDMENT OF LAW RECOMMENDED

We recommend that the foregoing features of the Massachusetts law be adopted in this State; also that section 355 of the act of 1908 be amended so as to require brokers to furnish to their customers *in all cases*, and not merely on demand, the names of brokers from whom shares were bought and to whom they were sold; and that the following section be added to the act:

Witness's privilege:

No person shall be excused from attending and testifying, or producing any books, papers, or other documents before any court or magistrate, upon any trial, investigation, or proceeding initiated by the district attorney for a violation of any of the provisions of this chapter, upon the ground or for the reason that the testimony or evidence, documentary or otherwise, required of him may tend to convict him of a crime or to subject him to a penalty or forfeiture; but no person shall be prosecuted or subjected to any penalty or forfeiture for or on account of any transaction, matter, or thing concerning which he may so testify or produce evidence, documentary or otherwise, and no testimony so given or produced shall be received against him upon any criminal investigation or proceeding.

There has been a sensible diminution in the number of bucket-shops in New York since the act of 1908 took effect, but there is still much room for improvement.

Continuous quotations of prices from an exchange are indis-

pensible to a bucket-shop, and when such quotations are cut off this gambling ends; therefore every means should be employed to cut them off.

SALES OF QUOTATIONS

The quotations of exchanges have been judicially determined to be their own property, which may be sold under contracts limiting their use. In addition to supplying its own members in New York city with its quotations, the Stock Exchange sells them to the telegraph companies, under contracts restricting the delivery of the service in New York city to subscribers approved by a committee of the Exchange; the contracts are terminable at its option. This restriction would imply a purpose on the part of the Exchange to prevent the use of the quotations by bucket-shop keepers. But the contracts are manifestly insufficient, in that they fail to cover the use of the service in places other than New York city; if corroboration were needed it could be found in the fact that the quotations are the basis for bucket-shop transactions in other cities. In such effort as has been made to control these quotations the Exchange has been hampered, to some extent, by the claim that telegraph companies are common carriers, and that as such they must render equal service to all persons offering to pay the regular charge therefor. This claim has been made in other States as well as in New York, and the telegraph companies have in the past invoked it as an excuse for furnishing quotations to people who were under suspicion, although it was not possible to prove that they were operating bucket-shops. Recent decisions seem to hold that this claim is not well-founded. We advise that a law be passed providing that, so far as the transmission of continuous quotations is concerned, telegraph companies shall not be deemed common carriers, or be compelled against their volition to transmit such quotations to any person; also a law providing that if a telegraph company has reasonable ground for believing that it is supplying quotations to a bucket-shop, it be criminally liable equally with the keeper of the bucket-shop. Such laws would enable these companies to refuse to furnish quotations upon mere suspicion that parties are seeking them for an unlawful business, and would compel them to refuse such service wherever there was reasonable ground for believing that a bucket-shop was being conducted.

LICENSING TICKERS

Tickers carrying the quotations should be licensed and bear a plate whereon should appear the name of the corporation, firm, or individual furnishing the service or installing the ticker, and a license number. Telegraph companies buying or transmitting quotations from the exchanges should be required to publish semi-annually the names of all subscribers to the service furnished, and the number and location of the tickers, in a newspaper of general circulation published in the city or town in which such tickers are installed. In case the service is furnished to a corporation, firm, or person, in turn supplying the quotations to others, like particulars should be published. A record, open to public inspection, should be kept by the installing company showing the numbers and location of the tickers. Doubtless local boards of trade, civic societies, and private individuals would, if such information were within their reach, lend their aid to the authorities in the enforcement of the law.

Measures should be taken also to control the direct wire service for the transmission of quotations and for the prompt discontinuance of such service in case of improper use thereof. In short, every possible means should be employed to prevent bucket-shops from obtaining the continuous quotations, without which their depredations could not be carried on a single day.

THE COMMODITY EXCHANGES

Of the seven commodity exchanges in the city of New York, three dealing with Produce, Cotton, and Coffee, are classed as of major importance; two organized by dealers in Fruit and Hay, are classed as minor; and two others, the Mercantile (concerned with dairy and poultry products) and the Metal (concerned with mining products) are somewhat difficult of classification, as will appear hereafter.

THE MAJOR EXCHANGES

The business transacted on the three major exchanges is mainly speculative, consisting of purchases and sales for future delivery either by those who wish to eliminate risks or by those who seek to profit by fluctuations in the value of products. "Cash" or "spot" transactions are insignificant in volume.

The objects, as set forth in the charters, are to provide places for trading, establish equitable trade principles and usages, ob-

tain and disseminate useful information, adjust controversies, and fix by-laws and rules for these purposes.

Trading in differences of price and "wash sales" are strictly prohibited under penalty of expulsion. All contracts of sale call for delivery, and unless balanced and cancelled by equivalent contracts of purchase, must be finally settled by a delivery of the merchandise against cash payment of its value as specified in the terms of the contract; but the actual delivery may be waived by the consent of both parties. Possession is for the most part transferred from the seller to the purchaser by warehouse receipts entitling the holder to the ownership of the goods described.

DEALING IN "FUTURES"

The selling of agricultural products for future delivery has been the subject of much controversy in recent years. A measure to prohibit such selling, known as the Hatch Anti-Option bill, was debated at great length in Congress during the years 1892, 1893, and 1894. Although it passed both House and Senate in different forms, it was finally abandoned by common consent. As shown hereafter, similar legislation in Germany has proved injurious; and when attempted by our States it has either resulted detrimentally or been inoperative. The subject was exhaustively considered by the Industrial Commission of Congress which in 1901 made an elaborate report (Vol. VI), showing that selling for future delivery, based upon a forecast of future conditions of supply and demand, is an indispensable part of the world's commercial machinery, by which prices are, as far as possible, equalized throughout the year to the advantage of both producer and consumer. The subject is also treated with clearness and impartiality in the *Cyclopedia of American Agriculture*, in an article on "Speculation and Farm Prices"; where it is shown that since the yearly supply of wheat, for example, matures within a comparatively short period of time somebody must handle and store the great bulk of it during the interval between production and consumption. Otherwise the price will be unduly depressed at the end of one harvest and correspondingly advanced before the beginning of another.

Buying for future delivery causes advances in prices; selling short tends to restrain inordinate advances. In each case there must be a buyer and a seller and the interaction of their trading steadies prices. Speculation thus brings into the market a

distinct class of people possessing capital and special training who assume the risks of holding and distributing the proceeds of the crops from one season to another with the minimum of cost to producer and consumer.

HEDGING

A considerable part of the business done by these exchanges consists of "hedging." This term is applied to the act of a miller, for example, who is under contract to supply a given quantity of flour monthly throughout the year. In order to insure himself against loss he makes a contract with anybody whom he considers financially responsible, to supply him wheat at times and in the quantities needed. He "hedges" against a possible scarcity and consequent rise in the price of wheat. If the miller were restricted in his purchases to persons in the actual possession of wheat at the time of making the contract he would be exposed to monopoly prices. If the wheat producer were limited in his possibilities of sale to consumers only, he would be subjected to the depressing effects of a glut in the market in June and September, at times of harvest.

To the trader, manufacturer, or exporter, the act of transferring the risk of price fluctuations to other persons who are willing to assume it, has the effect of an insurance. It enables him to use all of his time and capital in the management of his own business instead of devoting some part of them to contingencies arising from unforeseen crop conditions.

ALTERNATIVE CONTRACTS

In order to eliminate the risk of a shortage of specific grades of the merchandise thus traded in, contracts generally permit the delivery of alternative grades, within certain limits, at differential prices; and if the grade to be delivered be not suitable for the ultimate needs of the purchaser, it can under ordinary circumstances be exchanged for the grade needed, by the payment of the differential. It is true that in this exchange of grades there is sometimes a loss or a profit, owing to some unexpected diminution or excess of supply of the particular grade wanted, due to the weather or other natural causes.

Deposits of cash margins may be required mutually by members at the time of making contracts, and subsequent additional ones if market fluctuations justify.

Dealings for outsiders are usually upon a 10 per cent. margin; obviously if this margin were increased generally, say to 20 per cent., a considerable part of the criticism due to losses in speculation, particularly as to the Cotton Exchange, would be eliminated.

The major part of the transactions are adjusted by clearing systems, the method most prevalent being "ring settlements," by which groups of members having buying and selling contracts for identical quantities, offset them against each other, cancelling them upon the payment of the differences in prices.

THE PRODUCE EXCHANGE

The New York Produce Exchange was chartered by the Legislature in 1862, under the style of the "New York Commercial Association." The charter has been amended several times; in 1907 dealing in securities, as well as in produce, was authorized. There are over 2,000 members, but a large number are inactive. Some members are also connected with the Stock and Cotton Exchanges. The business includes dealing in all grains, cotton-seed oil, and a dozen or more other products; wheat is, however, the chief subject of trading, and part thereof consists of hedging by and for millers, exporters, and importers, both here and abroad. The quantity of wheat received in New York in the five years 1904-1908 averaged 21,000,000 bushels annually. No record of "cash" sales is kept. The reported sales of "futures" show in five years an annual average of 480,000,000 bushels, the year 1907 showing 610,000,000. Although some of these sales were virtually bets on price differences, all of them were contracts enforceable at law.

CLEARING SYSTEM

The greater part of the transactions are settled by a clearing system. The Clearing Association is a separate organization, duly incorporated, with a capital of \$25,000. All members of the association must settle daily by the clearing system; other members of the Exchange may do so. The Clearing Association assumes responsibility for the trades of all its members, and accordingly controls the exaction of margins from members to each other, and may increase them at any time if the fluctuations require it. The records of the clearings show day by day the status of each member's trading—how much he may be "long"

or "short" in the aggregate. Thus the members have a system of protection against each other; the welfare of all depends upon keeping the commitments of each within safe limits. The official margin system operates as a commendable restraint upon over-speculation.

From our examination of the trading in mining stocks recently introduced, we conclude that the lack of experience of this body in this class of business has resulted in a neglect of proper safeguards to the investor and an undue incitement to speculative transactions of a gambling nature, and should not be tolerated on the Produce Exchange.

THE COTTON EXCHANGE

The New York Cotton Exchange was incorporated by a special charter in 1871. Its membership is limited to 450. It is now the most important cotton market in the world, as it provides the means for financing about 80 per cent. of the crop of the United States and is the intermediary for facilitating its distribution. In fact, it is the world's clearing house for the staple. Traders and manufacturers in Japan, India, Egypt, Great Britain, Germany, France, and Spain, as well as the United States, buy and sell here daily and the business is still increasing.

Cotton is the basis of the largest textile industry in the world. The business is conducted on a gigantic scale in many countries, by means of vast capital, complicated machinery, and varied processes involving considerable periods of time between the raw material and the finished product. Selling for future delivery is necessary to the harmonious and uninterrupted movement of the staple from producer to consumer. Nearly all the trading, beginning with that of the planter, involves short selling. The planter sells to the dealer, the dealer to the spinner, the spinner to the weaver, the weaver to the cloth merchant, before the cotton of any crop year is picked. Dealers who take the risk of price fluctuations insure all the other members of this trading chain against losses arising therefrom and spare them the necessity of themselves being speculators in cotton. The risks connected with raising and marketing cotton must be borne by someone, and this is now done chiefly by a class who can give their undivided attention to it.

GRADING OF COTTON

The grading of cotton is the vital feature of the trade. When

no grade is specified in the contract, it is construed to be middling. There are now eighteen grades ranging from middling stained up to fair. This classification differs somewhat from that of other markets, and last January the Department of Agriculture at Washington took up the subject of standardizing the various grades for all American markets. The New York Cotton Exchange participated in this work; a standard was thus adopted, the types of which were supplied by its classification committee. It varies but little from the one previously in use here. The samples chosen to represent the several types are now sealed, in possession of the Department of Agriculture, awaiting the action of Congress.

The cotton plant is much exposed to vicissitudes of the weather. A single storm may change the grade of the crop in large sections of the country. It becomes necessary therefore to provide some protection for traders who have made contracts to deliver a particular grade which has become scarce by an accident which could not be foreseen. For this purpose alternative deliveries are allowed by the payment of corresponding price differentials, fixed by a committee of the Exchange twice annually, in the months of September and November.

Settlements of trades may be made individually, or by groups of members, or through a clearing system, the agency of which is a designated bank near the Exchange. No record is kept of the transactions, but it is probable that for a series of years the sales have averaged fully 50,000,000 bales annually.

INORDINATE SPECULATION

There have been in the past, instances of excessive and unreasonable speculation upon the Cotton Exchange, notably the Sully speculation of 1904. We believe that there is also a great deal of speculation of the gambling type mentioned in the introduction to this report. In our opinion, the Cotton Exchange should take measures to restrain and, so far as possible, prevent these practices, by disciplining members who engage in them. The officers of the Exchange must in many cases be aware of these practices, and could, in our opinion, do much to discourage them.

THE COFFEE EXCHANGE

The Coffee Exchange was incorporated by special charter in 1885. It has 320 members, about 80 per cent. active.

It was established in order to supply a daily market where coffee could be bought and sold and to fix quotations therefor, in distinction from the former method of alternate glut and scarcity, with wide variations in price—in short, to create stability and certainty in trading in an important article of commerce. This it has accomplished; and it has made New York the most important primary coffee market in the United States. But there has been recently introduced a non-commercial factor known as “valorization,” a governmental scheme of Brazil, by which the public treasury has assumed to purchase and hold a certain percentage of the coffee grown there, in order to prevent a decline of the price. This has created abnormal conditions in the coffee trade.

All transactions must be reported by the seller to the superintendent of the Exchange, with an exact statement of the time and terms of delivery. The record shows that the average annual sales in the past five years have been in excess of 16,000,000 bags of 250 pounds each.

Contracts may be transferred or offset by voluntary clearings by groups of members. There is no general clearing system. There is a commendable rule providing that, in case of a “corner,” the officials may fix a settlement price for contracts to avoid disastrous failures.

THE OTHER EXCHANGES

Of the exchanges which we have classed as minor, those dealing with Fruit and Hay appear to be in nowise concerned with speculation. No sales whatever are conducted on them, all transactions being consummated either in the places of business of the members or at public auction to the highest bidder. No quotations are made or published.

In the case of the other two commodity exchanges, the Mercantile and the Metal, new problems arise. Although quotations of the products appertaining to these exchanges are printed daily in the public press, they are not a record of actual transactions amongst members, either for immediate or future delivery.

It is true that on the Mercantile Exchange there are some desultory operations in so-called future contracts in butter and eggs, the character of which is, however, revealed by the fact that neither delivery by the seller nor acceptance by the buyer is obligatory; the contract may be voided by either party by payment of a maximum penalty of 5 per cent. There are nominal

"calls," but trading is confessedly rare. The published quotations are made by a committee, the membership of which is changed periodically. That committee is actually a close corporation of the buyers of butter and eggs, and the prices really represent their views as to the rates at which the trade generally should be ready to buy from the farmers and country dealers.

Similar, but equally deceptive, is the method of making quotations on the Metal Exchange. In spite of the apparent activity of dealings in this organization in published market reports, there are no actual sales on the floor of the Metal Exchange, and we are assured that there have been none for several years. Prices are, however, manipulated up and down by a quotation committee of three, chosen annually, who represent the great metal selling agencies as their interest may appear, affording facilities for fixing prices on large contracts, mainly for the profit of a small clique, embracing, however, some of the largest interests in the metal trade.

These practices result in deceiving buyers and sellers. The making and publishing of quotations for commodities or securities by groups of men calling themselves an exchange, or by any other similar title, whether incorporated or not, should be prohibited by law, where such quotations do not fairly and truthfully represent any *bona-fide* transactions on such exchanges. Under present conditions, we are of the opinion that the Mercantile and Metal Exchanges do actual harm to producers and consumers, and that their charters should be repealed.

THE EXPERIENCE OF GERMANY

In 1892 a commission was appointed by the German Government to investigate the methods of the Berlin Exchange. The regular business of this Exchange embraced both securities and commodities; it was an open board where anybody by paying a small fee could trade either for his own account, or as a broker. The broker could make such charge as he pleased for his services, there being no fixed rate of commission. Settlements took place monthly. Margins were not always required. Under these circumstances many undesirable elements gained entrance to the Exchange and some glaring frauds resulted.

The commission was composed of government officials, merchants, bankers, manufacturers, professors of political economy, and journalists. It was in session one year and seven months. Its report was completed in November, 1893. Although there had

been a widespread popular demand that all short-selling should be prohibited, the commission became satisfied that such a policy would be harmful to German trade and industry, and they so reported. They were willing, however, to prohibit speculation in industrial stocks. In general the report was conservative in tone.

THE LAW OF 1896

The Reichstag, however, rejected the bill recommended by the commission and in 1896 enacted a law much more drastic. The landowners, constituting the powerful Agrarian party, contended that short-selling lowered the price of agricultural products, and demanded that contracts on the Exchange for the future delivery of wheat and flour be prohibited. The Reichstag assented to this demand. It yielded also to demands for an abatement of stock speculation, and prohibited trading on the Exchange in industrial and mining shares for future delivery. It enacted also that every person desiring to carry on speculative transactions be required to enter his name in a public register, and that speculative trades by persons not so registered should be deemed gambling contracts and void. The object of the registry was to deter the small speculators from stock gambling and restrict speculation to men of capital and character.

The results were quite different from the intention of the legislators. Very few persons registered. Men of capital and character declined to advertise themselves as speculators. The small fry found no difficulty in evading the law. Foreign brokers, seeing a new field of activity opened to them in Germany, flocked to Berlin and established agencies for the purchase and sale of stocks in London, Paris, Amsterdam, and New York. Seventy such offices were opened in Berlin within one year after the law was passed, and did a flourishing business. German capital was thus transferred to foreign markets. The Berlin Exchange became insignificant and the financial standing of Germany as a whole was impaired.

DETRIMENTAL CONSEQUENCES

This, however, was not the most serious consequence of the new law. While bankers and brokers, in order to do any business at all, were required to register, their customers were not compelled to do so. Consequently the latter could speculate

through different brokers on both sides of the market, pocketing their profits and welching on their losses as gambling contracts. Numerous cases of this kind arose, and in some the plea of wagering was entered by men who had previously borne a good reputation. They had yielded to the temptation which the new law held out to them.

Another consequence was to turn over to the large banks much of the business previously done by independent houses. Persons who desired to make speculative investments in home securities applied directly to the banks, depositing with them satisfactory security for the purchases. As the German banks were largely promoters of new enterprises, they could sell the securities to their depositors and finance the enterprises with the deposits. This was a profitable and safe business in good times, but attended by dangers in periods of stringency, since the claims of depositors were payable on demand. Here again the law worked grotesquely, since customers whose names were not on the public register could, if the speculation turned out badly, reclaim the collateral or the cash that they had deposited as security.

MODIFICATION OF LAW IN 1908

The evil consequences of the law of 1896 brought about its partial repeal in 1908. By a law then passed the government may, in its discretion, authorize speculative transactions in industrial and mining securities of companies capitalized at not less than \$5,000,000; the Stock Exchange Register was abolished; all persons whose names were in the "Handelsregister" (commercial directory), and all persons whose business was that of dealing in securities, were declared legally bound by contracts made by them on the Exchange. It provided that other persons were not legally bound by such contracts, but if such persons made deposits of cash or collateral security for speculative contracts, they could not reclaim them on the plea that the contract was illegal.

Insofar as the Reichstag in 1896 had aimed to prevent small speculators from wasting their substance on the Exchange, it not only failed, but, as we have seen, it added a darker hue to evils previously existing.

Germany is now seeking to recover the legitimate business thrown away twelve years ago. She still prohibits short selling of grain and flour, although the effects of the prohibition have been quite different from those which its supporters anticipated.

As there are no open markets for those products, and no continuous quotations, both buyers and sellers are at a disadvantage; prices are more fluctuating than they were before the passage of the law against short-selling.

THANKS TO THE CHAMBER OF COMMERCE

Our cordial thanks are due to the Chamber of Commerce of the State of New York, for the free use of rooms in its building for our sessions, and of its library, and other facilities.

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